

UNITED STATES AIR FORCE



OCCUPATIONAL SURVEY REPORT



FIRE PROTECTION

AFSC 3E7X1

OSSN 2330

FEBRUARY 1999

19990819 123

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
1550 5TH STREET EAST
RANDOLPH AFB, TEXAS 78150-4449

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DISTRIBUTION FOR AFSC 3E7X1 OSR

	<u>OSR</u>	ANL EXT	TNG EXT	JOB <u>INV</u>	
AFOMS/OMDQ	1				
AFOMS/OMYXL	10		5	10	
AL/HRMM	2				
ARMY OCCUPATIONAL SURVEY BRANCH	1				
CCAF/AYX	1				
DEFENSE TECHNICAL INFORMATION CENTER	2				
HQ ACC/DPPEE	3		3		
HQ AETC/DPSE	3		3		
HQ AFCESA/DMG	1		1		
HQ AFMC/DPE	3		3		
HQ AFPC/DPAAD1	1				
HQ AFPC/DPPAC	1				
HQ AFSOC/DPPMT	2		2		
HQ AFSPC/DPAE	3		3		
HQ AMC/DPPET	1				
HQ PACAF/DPPET	3		3	•	
HQ USAFE/DPATTJ	3		3		
HQ USMC/STANDARDS BRANCH	1 1				
NAVMAC	1				
Tech School Distribution Listing	4	1	2	1	
312 TRS/XPM					
301 Comanche Trail					
Goodfellow AFB TX 76908-5000					
Attn: Mr Ben Cheek			1		
Tech School Training Evaluation Division 17 TRG/CCME 156 Marauder St	1		1		
Goodfellow AFB TX 76908-5000					

TABLE OF CONTENTS

	PAGE <u>NUMBER</u>
PREFACE	vi
SUMMARY OF RESULTS	viii
INTRODUCTION	1
Background	1
SURVEY METHODOLOGY	2
Inventory Development Survey Administration Survey Sample Task Factor Administration	2 3
SPECIALTY JOBS (Career Ladder Structure)	7
Overview of Specialty Jobs	9 25
ANALYSIS OF DAFSC GROUPS	28
Skill-Level Descriptions.	
TRAINING ANALYSIS	40
First-Enlistment Personnel Training Emphasis (TE) and Task Difficulty (TD) Data Specialty Training Standard (STS)	46
JOB SATISFACTION ANALYSIS	52
IMPLICATIONS	50

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

(Tables, Figures, Appendices)

		PAGE NUMBER
TABLE 1	COMMAND DISTRIBUTION OF AFSC 3E7X1 PERSONNEL	4
TABLE 2	PAYGRADE DISTRIBUTION OF SURVEY SAMPLE	5
TABLE 3	RELATIVE TIME SPENT ON DUTIES BY SPECIALTY JOBS	19
TABLE 4	SELECTED BACKGROUND DATA FOR SPECIALTY JOBS	22
TABLE 5	SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1995 SURVEYS	26
TABLE 6	DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS (PERCENT RESPONDING)	31
TABLE 7	RELATIVE TIME SPENT ON DUTIES BY SKILL LEVEL PERSONNEL	32
TABLE 8	REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL PERSONNEL	33
TABLE 9	REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL PERSONNEL	34
TABLE 10	TASKS WHICH BEST DIFFERENTIATE BETWEEN 3- AND 5-SKILL LEVEL I (PERCENT MEMBERS PERFORMING)	
TABLE 11	REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL PERSONNEL	36
TABLE 12	TASKS WHICH BEST DIFFERENTIATE BETWEEN 5- AND 7-SKILL LEVEL F (PERCENT MEMBERS PERFORMING)	
TABLE 13	REPRESENTATIVE TASKS PERFORMED BY 9-SKILL LEVEL PERSONNEL	38
TABLE 14	TASKS WHICH BEST DIFFERENTIATE BETWEEN 7-AND 9-SKILL LEVEL P. (PERCENT MEMBERS PERFORMING)	
TABLE 15	RELATIVE TIME SPENT ON DUTIES BY FIRST-ENLISTMENT PERSONNEL	42
TABLE 16	REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT PERSON	NEL43
TABLE 17	VEHICLES/EQUIPMENT USED OR OPERATED BY FIRST-ENLISTMENT PER	
TABLE 18	FIRE PROTECTION EQUIPMENT USED OR OPERATED BY FIRST-ENLISTM PERSONNEL	ENT
TABLE 19	TASKS WITH HIGHEST TRAINING EMPHASIS	47
TABLE 20	TASKS WITH HIGHEST TASK DIFFICULTY	48
TABLE 21	EXAMPLES OF STS ITEMS NOT SUPPORTED BY CRITERION GROUP SURV (LESS THAN 20 PERCENT MEMBERS PERFORMING)	

	. 7 7					
TABLE 22					NT OR MORE GR	
TABLE 23	COMPARISON (PERCENT MEN			TORS BY TAFM	S GROUPS	54
TABLE 24	COMPARISON (GROUPS (PERC			EVIOUS SURVE	Y BY TAFMS	55
TABLE 25	COMPARISON (PERCENT MEN			TORS BY SPECIA	ALTY JOBS	56
FIGURE 1	AFSC 3E7X1 SP	ECIALTY JOBS	(N=1,925)	:		8
FIGURE 2	AFSC 3E7X1 FII	RST-ENLISTMEN	NT PERSONNEL	SPECIALTY JOE	3S (N=998)	41
 APPENDIX	A SELECTED R JOB GROUP	EPRESENTATIV	/E TASKS PERF	ORMED BY SPE	CIALTY	60
					· ?	

PREFACE

This report presents the results of an Air Force Occupational Survey of the Fire Protection career ladder, Air Force Specialty Code (AFSC) 3E7X1. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

The survey instrument was developed by First Lieutenant Denise Minerva, Inventory Development Specialist. Computer programming support was provided by Ms. Jeanie Guesman. First Lieutenant Robert J. Schmoldt, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to AFOMS/OMYXI, 1550 5th Street East, Randolph Air Force Base, Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other ongoing projects, visit our web site at http://www.omsq.af.mil.

GEORGE KAILIWAI III, Lt Col, USAF Commander Air Force Occupational Measurement Sq JOSEPH S. TARTELL Chief, Occupational Analysis Flight Air Force Occupational Measurement Sq. THIS PAGE INTENTIONALLY LEFT BLANK

SUMMARY OF RESULTS

- 1. <u>Survey Coverage</u>: The Fire Protection career ladder (AFSC 3E7X1) was surveyed to obtain current job and task data for use in examining training programs. Survey results are based on responses from 1,925 Active Duty AFSC 3E7X1 personnel, 51 percent of the total personnel assigned and 54 percent of the total personnel surveyed.
- 2. <u>Specialty Jobs</u>: Structure analysis identified one cluster and eight jobs: Firefighter Apprentice Job, Firefighter Job, Technical Training Instructor Job, First Line Supervision Job, Management Cluster, FACC Operator Job, Fire Inspection Job, Logistics NCO Job, and Fire Extinguisher Maintenance Job. Most personnel are distributed into the Firefighter Job (63 percent), or the Management Cluster (9 percent).
- 3. <u>Career Ladder Progression</u>: Personnel in the Fire Protection career ladder follow a typical career progression pattern. Three- and 5-skill level personnel perform technical functions oriented toward general fire protection activities. Seven- and 9-skill level members perform more supervisory and managerial tasks.
- 4. <u>Training Analysis</u>: An examination of the Specialty Training Standard reveals a very well supported document. Only five areas within the General Contingency Responsibilities area warrant closer examination due to a lack of support. Some tasks that were not matched to areas within the STS should be considered for inclusion based on a high training emphasis and high percentages of members performing.
- 5. <u>Job Satisfaction</u>: When compared to the previous 1995 survey and to a comparative sample of similar AFSCs surveyed in 1997, members within AFSC 3E7X1 seemed satisfied. Job satisfaction indicators were generally higher than the direct support comparison samples across TAFMS groups. Satisfaction within jobs or the cluster identified indicates that the majority of "firefighters" feel their jobs are interesting, their talents and training are well utilized, and they obtain a sense of accomplishment from their work. Surprisingly, reenlistment intentions have decreased across all TAFMS groups.
- 6. <u>Implications:</u> Survey results indicate that the present classification structure, as described in the latest specialty description, reflects the jobs performed in this career ladder. The AFSC 3E7X1 Specialty Training Standard needs to be reviewed by training personnel to resolve areas that lack support. The career ladder progression is good, with a noticeable transition from technical work at the 3- and 5-skill levels to supervisory and management work at the 7- and 9-skill levels. Job satisfaction indicators of AFSC 3E7X1 personnel have increased or remained the same. All members in AFSC 3E7X1 expressed a lower intent to re-enlist when compared to the 1995 OSR, as well as the comparative sample.

THIS PAGE INTENTIONALLY LEFT BLANK

OCCUPATIONAL SURVEY REPORT (OSR) FIRE PROTECTION (AFSC 3E7X1)

INTRODUCTION

This is a report of an occupational survey for the Fire Protection career ladder as conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS). Data collected from this survey will provide the most current information available to aid in updating and validating career ladder documents and training programs. The last occupational survey report for this AFSC was published in May 1995.

Background

As described in the AFMAN 36-2108, *Airman Classification*, dated 11 Mar 98, Fire Protection members protect people, property, and the environment from fires and disasters. Members also provide fire prevention, firefighting, rescue, and hazardous material responses.

Specific duties and responsibilities of AFSC 3E7X1 may include:

Planning, organizing, and directing all fire protection activities. Providing fire prevention guidance. Controlling and extinguishing aircraft, structure, wildland, and miscellaneous fires. Effecting entry into aircraft, structures, and other enclosures. Conducting search and rescue operations. Administering first aid.

Entrants into the AFSC 3E7X1 career ladder must attend course X3ABR3E731 006, Fire Protection Apprentice, at Goodfellow AFB, TX. This course lasts 68 academic days and provides "hands-on" training and knowledge required by the AFSC 3E7X1 STS. Training includes fire protection fundamentals; organization and safety; fire behavior; fire alarm and communications; building construction; fire prevention; emergency medical care, responder skills; emergency care plans; structural firefighting principles; personal protective equipment; forcible entry; ropes, knots, and rescue practices; rescue activities and vehicle extrication; ladder and ventilation practices; structural fire ground operations; water supplies; responder at the awareness and operational levels; airport firefighter; aircraft and airport familiarization; aircraft response and firefighting principles; aircraft rescue firefighting; live fire training; and readiness general contingency responsibilities.

Entry into this career field requires an ASVAB score of "GENERAL" 39 and a strength factor of "N" (weight lift of 100 lbs). Other criteria includes meeting visual acuity standards, possessing normal color vision, the ability to speak distinctly, qualification to operate government vehicles, and no record of pyrophobia, acrophobia, or claustrophobia. Additionally, members must meet eligibility requirements for a Secret security clearance and be a US Citizen.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) OSSN 2330, dated May 1998. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, pertinent tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 56 subject-matter experts (SMEs) at the following locations:

BASE Goodfellow AFB, TX	UNIT VISITED 312 TRS
Eglin AFB, FL	96 CES
Travis AFB, CA	60 CES
Nellis AFB, NV	99 CES
Edwards AFB, CA	95 CEG
Vandenberg AFB, CA	30 CES

The resulting JI contains a comprehensive listing of 892 tasks grouped under 19 duty headings, and a background section. Special background questions concern: Schedule Worked, Level of Education, Fire-related College Courses, Maximum Weight Needed to Lift, Physical Fitness Participation, Physical Fitness Monitoring, Physical Fitness Importance, Physical Fitness Level, Physical Fitness Component, Firefighter (FF) Certification Level, FF Multimedia Courses Taken, Emergency Medical Technician (EMT) Certification, Emergency Medical Dispatcher (EMD) Certification, Defibrillator Certification, Fire Protection Vehicles, Emergency Victim Care Equipment, Fire Protection Equipment, Fire Suppression Systems, Prime BEEF, Deployment Length, Number of Exercises, Units Backfilled by Air Force Reserve Command/Air National Guard.

Survey Administration

From May 1998 through October 1998, Survey Control Monitors at base training units worldwide administered the inventory to all eligible AFSC 3E7X1 personnel. Members eligible for the survey consisted of the active duty total assigned 3-, 5-, 7-, and 9-skill level population, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring within the time the inventories were administered to the field; and (4) personnel in their job less than 6 weeks. Job incumbents were selected from a

computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a comparison basis for percent members performing tasks and average percent time spent on tasks.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across MAJCOMs and paygrade groups. All eligible AFSC 3E7X1 personnel were mailed survey booklets. Table 1 reflects the percentage distribution, by MAJCOM, of assigned AFSC 3E7X1 personnel as of May 1998. The 1,925 respondents in the final sample represent 51 percent of the total assigned personnel and 54 percent of the total personnel surveyed. Table 2 reflects the paygrade distribution for these AFSC 3E7X1 personnel. The survey sample is considered to be a satisfactory representation of the overall career ladder population.

TABLE 1

COMMAND DISTRIBUTION OF AFSC 3E7X1 PERSONNEL

	PERCENT OF	PERCENT OF
COMMAND	ASSIGNED*	SAMPLE
ACC	24	25
AETC	18	18
AMC	16	15
AFMC	12	12
PACAF	12	14
USAFE	10	8
AFSPC	6	7
AFSOC	2	1

TOTAL ASSIGNED* = 3,782 TOTAL SURVEYED** = 3,597 TOTAL IN SURVEY SAMPLE = 1,925 PERCENT OF ASSIGNED IN SAMPLE = 51% PERCENT OF SURVEYED IN SAMPLE = 54%

^{*} Assigned strength as of May 1998

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

	PERCENT OF	PERCENT OF
GRADE	ASSIGNED*	SAMPLE
E-1	5	0
E-2	11	11
E-3	29	31
E-4	21	21
E-5	19	22
E-6	8	8
E-7	5	5
E-8	1	1
E-9	1	1

^{*} Assigned strength as of May 1998

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 3E7X1 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from the Job Inventories. This information is used in a number of different analyses discussed in more detail within the report.

Training Emphasis (TE): TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 53 senior AFSC 3E7X1 NCOs who completed TE booklets were asked to select tasks they felt required some sort of structured training for entry-level personnel, and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. Inter-rater agreement

for these 53 raters was acceptable. The average TE rating was 2.66, with a standard deviation of 2.01. Any task with a TE rating of 4.67 or above is considered to have high TE.

<u>Task Difficulty (TD)</u>: TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 44 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Inter-rater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS

(Career Ladder Structure)

USAF Occupational Analysis begins with an examination of the career ladder structure. The structure of jobs within the Fire Protection career ladder was examined on the basis of similarity of tasks performed and the percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

Each individual in the sample performs a set of tasks called a <u>Job</u>. For the purpose of organizing individual jobs into similar units of work, an automated job-clustering program is used. This hierarchical grouping program is a fundamental part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description (all the tasks performed by that individual and the relative amount of time spent on those tasks) in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the JI. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups, or new groups are formed based on the similarity of tasks performed and similar time ratings in the individual job descriptions. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and defined as a <u>Cluster</u>. The structure of the career ladder is then defined in terms of <u>Jobs</u> and <u>Clusters</u>.

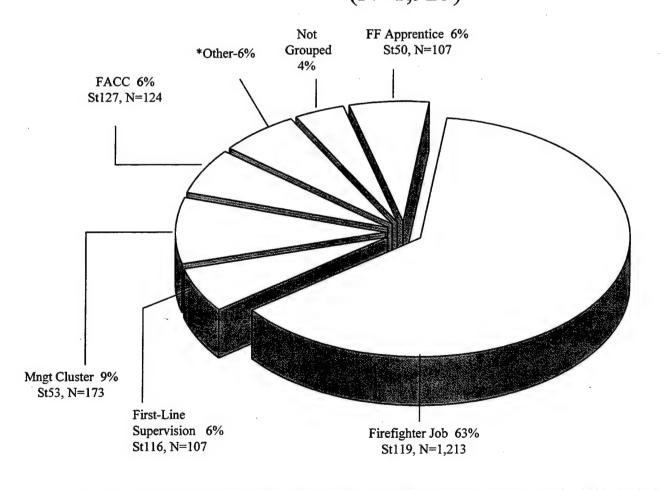
Overview of Specialty Jobs

The analysis procedure described above identified eight jobs and one cluster within the survey sample. The division of jobs performed by AFSC 3E7X1 personnel is illustrated in Figure 1, and a listing of those jobs is provided below. The stage (ST) number shown beside each title is a reference to computer-printed information. The number of personnel in each group or stage (N) is also shown.

- I. FIREFIGHTER APPRENTICE JOB (ST050, N=107)
- II. FIREFIGHTER JOB (ST119, N=1,213)
- III. TECHNICAL TRAINING INSTRUCTOR JOB (GP042, N=42)
- IV. FIRST-LINE SUPERVISION JOB (ST116, N=107)
- V. MANAGEMENT CLUSTER (ST053, N=173)
 - 1. COURSE MANAGEMENT JOB (ST128, N=5)
 - 2. ASSISTANT CHIEF OF TRAINING JOB (ST205, N=28)

- 3. ASSISTANT CHIEF OF OPERATIONS JOB (ST129, N=98)
- 4. FIRE PROTECTION/PREVENTION MANAGEMENT JOB (ST120, N=11)
- VI. FIRE ALARM COMMUNICATIONS CENTER (FACC) OPERATOR JOB (ST127, N=124)
- VII. FIRE INSPECTION JOB (ST172, N=36)
- VIII. LOGISTICS NCO JOB (ST112, N=18)
- IX. FIRE EXTINGUISHER MAINTENANCE JOB (ST102, N=9)

AFSC 3E7X1 SPECIALTY JOBS (N=1,925)



^{*} Other includes Fire Extinguisher Maintenance (1%), Fire Inspection (2%), Logistics NCO (1%), Technical Training Instructor (2%)

Group Descriptions

The following paragraphs contain brief descriptions of the jobs identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs and clusters. Selected background data for these jobs are provided in Table 4. Representative tasks for all the groups are contained in Appendix A.

- I. <u>FIREFIGHTER APPRENTICE JOB (ST050)</u>. The 107 airmen performing within this entry-level job represent 6 percent of the survey sample. This job is fairly homogeneous, meaning that members perform many of the same type of activities, although some diversity does exist. They perform an average of 58 tasks, the second lowest of any identified group. Fifty-nine percent of their time is spent performing General Fire Protection Activities (Duty B). An additional 6 percent of their time is spent Performing Fire Prevention Activities (Duty A). Typical of the tasks performed include:
 - Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers, or standpipes
 - Don or doff self-contained breathing apparatus (SCBAs) while wearing protective clothing
 - Carry ladders
 - Don or doff PPE for firefighting operations, other than hazardous materials
 - Operate SCBAs
 - Carry tools or equipment, other than hose lines, up or down ladders
 - Carry hose lines, up or down ladders
 - Operate fire hydrants
 - Operate smoke ejectors or blowers
 - Carry victims up or down ladders

Sixty-six percent of these members hold the 3-skill level and 31 percent hold the 5-skill level. Twenty-five percent are assigned overseas. Most personnel hold the paygrade of E-1 through E-3 (62 percent). Seventy-one percent of the 107 members are in their first-enlistment.

II. FIREFIGHTER JOB (ST119). The Firefighter Job is the largest distinct grouping of airmen and accounts for 63 percent of the total identifiable job structure. These 1,213 personnel perform the core technical structural and aerospace firefighting and fire prevention activities of the career field. Their duty activity involves Performing General Fire Protection Activities (Duty B, 21 percent), Performing Firefighting Vehicle Activities (Duty I, 13 percent), Performing General Equipment Activities (Duty K, 13 percent), Performing Emergency Victim Care and Rescue Operations (Duty J, 9 percent), Fighting Aerospace Vehicle Fires (Duty D, 6 percent), and Fighting Structural Fires (Duty F, 5 percent). This group of personnel perform an average of 241 tasks, the highest of any job group identified.

General Fire Protection tasks (Duty B) most typically performed include:

- Operate SCBAs
- Don or doff SCBAs while wearing protective clothing
- Carry ladders
- Operate smoke ejectors or blowers
- Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers, or standpipes
- Carry tools or equipment, other than hose lines, up or down ladders
- Don or doff PPE for firefighting operations, other than hazardous materials

General Equipment Activity tasks (Duty K) most typically performed include:

- Clean firefighting vehicles
- Clean firefighting equipment
- Inspect SCBAs
- Inspect or maintain personal protective clothing
- Demonstrate operation of firefighting equipment
- Inspect or maintain powered equipment
- Inspect or maintain ladders

Firefighting Vehicle Activities (Duty I) most typically performed include:

- Chock wheels of firefighting vehicles
- Inspect fire department vehicles
- Reservice firefighting vehicles
- Drive or operate firefighting vehicles, other than during emergency operations
- Perform vehicle turret operations
- Position equipment other than ladders
- Resupply firefighting vehicles during incidents

Fifty-eight percent of members within this cluster possess a 3-skill level and 40 percent have a 5-skill level. Fifty-two percent of the 1,213 personnel are E-1 through E-3, 24 percent are E-4, and 21 percent are E-5. Twenty-eight percent of the personnel in this group supervise at least one person. Members in this job average 5 years TAFMS. Twenty-seven percent of these Firefighter personnel are stationed overseas.

III. <u>TECHNICAL TRAINING INSTRUCTOR JOB (GP042)</u>. The 42 members that account for this job (2 percent of the survey sample) spend 18 percent of their time Performing Training Activities (Duty Q), 22 percent of their time Performing Fire Protection Activities (Duty B), 16 percent of their time Performing General Equipment Activities (Duty K), and ten percent of their time Performing Management and Supervisory Activities (Duty P).

These members perform an average of 114 tasks, indicating some diversity within this job, which is largely due to the course or block of instruction within the course being taught.

Training Activity tasks (Duty Q) most typically performed include:

- Evaluate progress of trainees
- Maintain training equipment
- Personalize lesson plans
- Counsel trainees on training progress
- Maintain training records or files
- Administer or score tests
- Brief personnel concerning training programs or matters

General Firefighting Activity tasks (Duty B) most typically performed include:

- Operate SCBAs
- Don or doff SCBAs, while wearing protective clothing
- Raise or lower ladders, other than aerial ladders
- Don or doff PPE for firefighting operation, other than hazardous materials
- Operate fire hydrants
- Operate cascade systems
- Carry ladders

General Equipment Activity tasks (Duty K) most typically performed include:

- Inspect or maintain protective clothing
- Inspect SCBAs
- Inspect or maintain powered equipment
- Demonstrate operation of firefighting equipment
- Inspect or maintain ladders
- Reservice SCBAs
- Clean forcible entry tools

Eighty-three percent of the 42 members in this job hold the DAFSC 3E751, with an additional 17 percent holding the DAFSC 3E771. Seventy-one percent of these members are E-5 and 22 percent are E-6. Average TAFMS is 12 years.

IV. <u>FIRST-LINE SUPERVISION JOB (ST116)</u>. This job represents a diverse grouping of personnel who perform many management, as well as firefighting activities. They call themselves an array of job titles to include: Firefighter, Crew Chief, Lead Firefighter, Fire Vehicle Driver, Station Captain, and Battalion Chief. Many of the personnel within this job would typically be found performing mid-level leadership and management functions during a typical 24-hr shift in the 72-hr workweek. These 107 individuals (6 percent of the survey

sample) spend most of their time (15 percent) Performing Management and Supervisory Activities (Duty P). Additionally, 10 percent of their time is spent Performing General Fire Protection Activities (Duty B), 8 percent of their time is spent Performing Training Activities (Duty Q), and 8 percent of their time is spent Performing Mobility and Contingency Activities (Duty Q). These members perform an average of 535 tasks, the highest of any job identified.

Management and Supervisory tasks (Duty P) typically performed include:

- Determine or establish work assignments or priorities
- Conduct task evaluations
- Assign personnel to work areas or duty positions, other than for mobility or contingency
- Counsel subordinates concerning personnel matters
- Assign sponsors for newly assigned personnel
- Evaluate personnel for compliance with performance standards
- Develop firefighter accountability procedures

General Fire Protection tasks (Duty B) typically performed include:

- Operate SCBAs
- Tie specific knots used in various firefighting operations
- Don or doff PPE for firefighting operations, other than hazardous materials
- Operate smoke ejectors or blowers
- Inspect or maintain rescue ropes
- Perform ventilation procedures
- Operate fire extinguishers

Forty-eight percent of the 107 members in this job hold the DAFSC 3E731, 34 percent hold the DAFSC 3E751, and 18 percent hold the DAFSC 3E771. Forty-two percent of these members are E-1 through E-3, 21 percent are E-6, and 19 percent are E-4. Average TAFMS is 6.4 years. Twenty-five percent of these personnel are assigned overseas. Forty percent of these members directly supervise at least one person.

V. MANAGEMENT CLUSTER (ST053). The 173 individuals (9 percent of the survey sample) that comprise the senior management jobs within the career ladder, spend most of their time (35 percent) Performing Management and Supervisory Activities (Duty P). They spend 21 percent of their time Performing Training Activities (Duty Q). Seventy-seven percent of these members perform supervisory activities, directly supervising an average of five people.

The first job identified was the Course Management Job, which is constructed of senior members at Goodfellow AFB within the 312th Training Squadron. The second and third jobs identified in this cluster include the Assistant Chief of Training Job and the Assistant Chief of Operations Job. These two jobs are linked together because of the similarity of tasks performed

and the interaction between the jobs within the typical fire department. The last job identified within this cluster is the Fire Protection/Prevention Management Job.

Forty-two percent of these clustered members can be found at the E-7 paygrade level, with an additional 32 percent in the E-6 paygrade, 12 percent at the E-5 paygrade, and 8 percent at the E-8 paygrade. Members within this cluster average 16 years TAFMS. Thirty-two percent of these personnel are stationed outside the CONUS.

A. Course Management Job (ST128). These 5 members spend 35 percent of their time Performing Training Activities (Duty Q) and spend an additional 34 percent of their time Performing Management and Supervisory Activities (Duty P). These members perform an average of 62 tasks.

Training Activity tasks (Duty Q) commonly performed include:

- Conduct formal classroom training
- Develop formal course curriculum, plans of instruction, or specialty training standards
- Develop written tests
- Administer or score tests
- Evaluate progress of trainees
- Inspect training materials or aids for operation or suitability
- Develop or procure training materials or aids

Management or Supervisory tasks (Duty P) commonly performed include:

- Evaluate personnel for compliance with performance standards
- Write recommendations for awards or decorations
- Inspect personnel for compliance with military standards
- Improve work methods
- Write or indorse military performance reports
- Conduct supervisory orientations for newly assigned personnel
- Conduct self-inspections or self-assessments

Three of the five people identified in this job hold the E-5 paygrade, and the other two hold the E-6 paygrade. These members average 17 years TAFMS. Four of these members directly supervise one to four personnel.

B. Assistant Chief of Training Job (ST205). These 28 members are directly responsible for developing and implementing the fire training program within each fire department. Fifty-three percent of their time is spent Performing Training Activity tasks (Duty Q), with an additional 23 percent of their time spent Performing Management and Supervisory Activity tasks (Duty P).

Typical of tasks spent **Performing Training Activities (Duty Q)** include:

- Evaluate progress of trainee
- Monitor student progress in career development courses
- Maintain training records or files
- Brief personnel concerning training programs or matters
- Counsel trainees on training progress
- Conduct ongoing proficiency training
- Schedule in-house training, such as mobility, Prime BEEF, instructor, or proficiency training

Typical of tasks spent Performing Management and Supervisory Activities (Duty P) include:

- Participate on exercise evaluation teams
- Evaluate personnel for compliance with performance standards
- Conduct task evaluations
- Inspect personnel for compliance with military standards
- Write recommendations for awards or decorations
- Evaluate emergency response procedures
- Write or endorse military performance reports

Thirty-six percent of these 28 members are in the paygrade of E-6, and an additional 36 percent are in the paygrade of E-7. These members average 14 years TAFMS.

C. Assistant Chief of Operations Job (ST129). These 98 members represent the largest grouping of personnel within this cluster and account for 5 percent of the total survey sample. Performing an average of 211 tasks (largest average number of tasks within this cluster), these members perform a wider range of management and supervisory functions in comparison to the other jobs within this cluster. Forty-three percent of their time is spent Performing Management and Supervisory Activities (Duty P). These members are in charge of the daily activities within a fire department. On average, they supervise nine personnel, the highest direct supervision activity of any job in the survey sample.

Management and Supervisory Activity tasks (Duty P) most commonly performed include:

- Inspect personnel for compliance with military standards
- Evaluate emergency response procedures
- Write or endorse military performance reports
- Write recommendations for awards or decorations
- Evaluate personnel for compliance with performance standards
- Interpret policies, directives, or procedures for subordinates
- Evaluate personnel for promotion, demotion, reclassification, or special awards
- Conduct supervisory performance feedback sessions
- Counsel subordinates concerning personal matters

Conduct post-incident analysis of fire incidents

Fifty-one percent of these members are in the paygrade of E-7, with an additional 28 percent in the paygrade of E-6, and 13 percent in the paygrade of E-8. These 98 members average 18 years TAFMS.

D. Fire Protection/Fire Prevention Management Job (ST120). Personnel in this job are primarily responsible for evaluating base fire protection and fire prevention programs. The eleven members in this job spend most of their time (34 percent) Performing Management and Supervisory Activities (Duty P), Performing Fire Prevention Activities (Duty A, 25 percent), Performing Training Activities (Duty Q, 8 percent), and Performing General Administrative and Technical Order System Activities (Duty R, 6 percent). On average, these 11 members directly supervise 4 personnel.

Management and Supervisory tasks (Duty P) most frequently performed by these members include:

- Evaluate priorities FSD programs
- Evaluate inspection report findings or inspection procedures
- Evaluate fire station facilities
- Conduct self-inspections or self-assessments
- Evaluate fire protection programs
- Evaluate fire prevention programs

Fire Prevention Activity tasks (Duty A) most frequently performed include:

- Research fire prevention publications
- Review alteration plans for compliance with fire safety requirements
- Participate in preconstruction conferences
- Monitor USAF Hazard Abatement Program, including USAF risk assessment code open items
- Inspect hangars
- Conduct building evacuation drills
- Conduct fire investigations

Fire Protection Activity tasks (Duty B) most frequently performed include:

- Inspect fire hydrants
- Inspect firefighting access roads or perimeters
- Ensure compliance with pre-incident plans
- Determine appropriate agents for firefighting operations
- Determine appropriate personal protection equipment for firefighting operations, other than hazardous materials

• Participate in fire investigations, other than conduct

Sixty-four percent of these members are in the paygrade of E-7, with an additional 27 percent in the paygrade of E-6, and 9 percent in the paygrade of E-8. These 11 members average 17 years TAFMS.

VI. FACC OPERATOR JOB (ST127). The responsibility to effectively communicate response efforts to fire protection personnel lies with the 124 airmen within this job (6 percent of the survey sample). In general, these responsibilities include receiving, recording, and relaying information to firefighters and support agencies, as well as dispatching vehicles, and informing personnel of location and degree of emergencies. They perform more Fire Alarm Communications Center Activities (Duty C) than any other job identified. Seventy-two percent of their time is spent on FACC-related activities within Duty C. An additional 7 percent of their time is spent performing Management and Supervisory Activities (Duty P). The average number of tasks performed by these members is 82, indicating only slight diversity within the job. Commonly performed tasks include:

- Inform crews of locations and nature of emergencies
- Implement recalls of firefighters
- Dispatch firefighting vehicles
- Inspect, operate, or maintain fire alarm communications center recording equipment
- Monitor radios, scanners, or networks
- Operate emergency telephone dispatch systems
- Record incoming fire calls
- Locate and relay hazardous materials information to firefighting crews
- Receive, record, or transmit administrative calls

Fifty-eight percent of these personnel hold the 5-skill level, 39 percent hold the 3-skill level, and three percent hold the 7-skill level. Thirty-six percent of these members are in the E-4 paygrade, with an additional 27 percent represented in the E-5 paygrade. Forty-seven percent of these personnel are in their first-enlistment.

VII. FIRE INSPECTION JOB (ST 172). Personnel in this job are responsible for inspecting base facilities and areas (i.e., family housing, hazard storage areas, or aircraft areas); special interest areas (i.e., hangars or warehouses), fire protection features (i.e., fire doors or walls); fire detection systems, and for educating, training, and distributing fire prevention information to base populace. These 36 airmen (2 percent of the survey sample) spend 57 percent of their time Performing Fire Prevention Activities (Duty A) and 11 percent of their time Performing Management and Supervisory Activities (Duty P). These personnel perform an average of 123 tasks, of which the most commonly performed include:

- Maintain facility folders
- Research fire protection publications
- Schedule facility inspections
- Brief personnel on fire safety or fire reporting procedures
- Inspect cooking facilities
- Schedule fire prevention activities
- Inspect self-help projects
- Conduct building evacuation drills
- Conduct follow-up inspections
- Conduct newcomer's briefings

Fifty-five percent of these 36 members are in the paygrade of E-5, with an additional 28 percent in the paygrade of E-6. Sixty-four percent of these Fire Inspectors hold the DAFSC 3E751. Average TAFMS for these members is 14 years. Forty-four percent of the 36 personnel are assigned overseas.

VIII. LOGISTICS NCO JOB (ST112). These 18 members (1 percent of the survey sample) ensure essential supplies and equipment items are on-hand when required. The personnel who work in the Logistics NCO Job spend 49 percent of their time Performing General Supply and Equipment Activities (Duty S), and an additional 23 percent of their time Performing Management and Supervisory Activities (Duty P). The 18 personnel identified in this job perform an average of 48 tasks. Some of the tasks that are most commonly performed include:

- Maintain International Merchants Purchase Authorization Card purchase logs
- Research commercial vendors for new equipment item procurement
- Pick-up, deliver, or store equipment, tools, parts, or supplies
- Maintain property CA/CRLs
- Monitor precision measurement equipment laboratory listings
- Reconcile IMPAC accounts
- Issue or log turn-ins of equipment, tools, parts, or supplies
- Verify M-36 obligated due-out listing
- Maintain D04 daily document registers or item surveillance lists
- Initiate requisitions for equipment, tools, parts, or supplies

Sixty-seven percent of the airmen in this group are in the paygrade of E-5, none of them supervise personnel, and they average 12 years TAFMS. Thirty-nine percent of these 18 members are assigned overseas.

IX. <u>FIRE EXTINGUISHER MAINTENANCE JOB (ST102).</u> These nine personnel are responsible for the inspection, maintenance, and operation of fire extinguishers. They spend over half of their time (52 percent) in Duty L (Maintaining Fire Extinguishers), most commonly performing the following tasks:

- Maintain fire extinguisher records
- Inspect fire extinguishers
- Remove or replace fire extinguisher valve assemblies, gauges, firehoses, nozzles
- Remove or replace extinguisher cart tires
- Service dry-chemical extinguishers
- Install safety pin display seals
- Identify malfunctions to extinguisher cart components
- Identify damages to extinguisher cart components
- Reservice or recover halon

Eight of the members in the Fire Extinguisher Maintenance Job serve either in the paygrade of E-4 (44 percent) or E-5 (44 percent). Average TAFMS for these nine members is 7 years. Five members hold DAFSC 3E751 and the other four hold DAFSC 3E731.

TABLE 3
RELATIVE PERCENT TIME SPENT ON DUTY BY SPECIALTY JOBS

	·	FIRE FIGHTER APPRENT	FIRE FIGHTER JOB	TECHNICAL TRAINING INSTRUCTOR	FIRST-LINE SUPERVISION JOB
		JOB	(ST119,	JOB	(ST116, N=107)
		(ST50,	N=1,213)	(GP42, N=42)	
DO	DUTIES	N=107			
Y.	PERFORMING FIRE PREVENTION ACTIVITIES	9	2	2	5
B.	PERFORMING GENERAL FIRE PROTECTION ACTIVITIES	59	21	22	10
ပ	PERFORMING FIRE ALARM COMMUNICATIONS CENTER	5	9	4	9
	(FACC) ACTIVITIES				
D.	FIGHTING AEROSPACE VEHICLE FIRES	4	9		4
пį	FIGHTING OR MITIGATING HAZARDOUS MATERIALS FIRES,	3	5	*	5
	SPILLS, OR LEAKS				
Ţ,	FIGHTING STRUCTURAL FIRES	n	S	2	2
Ö	FIGHTING WILDLAND FIRES	7	3	_	3
H.	FIGHTING MISCELLANEOUS FIRES	_	60	-	2
ï	PERFORMING FIREFIGHTING VEHICLE ACTIVITIES	4	13		· v:
Ŀ,	PERFORMING EMERGENCY VICTIM CARE AND RESCUE	_	6	4	
	OPERATIONS				
Υ.	PERFORMING GENERAL EQUIPMENT ACTIVITIES	9	13	91	4
ľ.	MAINTAINING FIRE EXTINGUISHERS		1	*	4
Σ̈́	MAINTAINING OR OPERATING RUNWAY BARRIERS	-	2	*	4
ż	PERFORMING PRIME BASE ENGINEER EMERGENCY FORCE	*	_	*	3
	(BEEF) ACTIVITIES				
o.	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	_	3	*	∞
Ρ.	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES		3	10	15
ċ	PERFORMING TRAINING ACTIVITIES	÷	3	18	∞
₩.	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL	*	*	2	3
	ORDER (TO) SYSTEM ACTIVITIES				
× Not	 S. PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES Note: Columns may not add to 100 percent due to rounding * Indicates less than 1 percent 	*	*	4	2
1					

TABLE 3 (CON'T)
RELATIVE PERCENT TIME SPENT ON DUTY BY SPECIALTY JOBS (MANAGEMENT CLUSTER)

	DUTIES	MNGT CLUSTER (ST53, N=173)	COURSE MNGT JOB (ST128, N=5)	ASST CH OF TRAINING JOB (ST205, N=28)	ASST CH OF OPS JOB (ST129, N=98)	FIRE PROT/PREV MNGT (ST120, N=11)
Ą ¤	PERFORMING FIRE PREVENTION ACTIVITIES PERFORMING GENERAL FIRE DROTECTION ACTIVITIES	4 -	2 ,	2	4	25
i Ci	PERFORMING FIRE ALARM COMMUNICATIONS CENTER (FACC) ACTIVITIES	4 4	n m	7 7	4 v	4 κ
D.	FIGHTING AEROSPACE VEHICLE FIRES	2	,	-	2	*
пi	FIGHTING OR MITIGATING HAZARDOUS MATERIALS FIRES, SPILLS, OR LEAKS	9	•	3	∞	es
Œ,	FIGHTING STRUCTURAL FIRES	_	•	*	_	-
Ö.	FIGHTING WILDLAND FIRES	2	•	*	'n	· m
H.	FIGHTING MISCELLANEOUS FIRES	1	1	*	,	,
I.	PERFORMING FIREFIGHTING VEHICLE ACTIVITIES		_	*		-
J.	PERFORMING EMERGENCY VICTIM CARE AND RESCUE OPERATIONS	_	S	*	1	*
⅓.	PERFORMING GENERAL EQUIPMENT ACTIVITIES	_	-	*	*	*
ij	MAINTAINING FIRE EXTINGUISHERS	*	1		*	2
Ŋ.	MAINTAINING OR OPERATING RUNWAY BARRIERS	*	•	*	*	•
ż	PERFORMING PRIME BASE ENGINEER EMERGENCY FORCE (BEEF) ACTIVITIES	-	•	-	-	*
0	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	9	1	3	∞	9
<u>а</u> ;	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	35	34	23	43	34
Ċ	PERFORMING TRAINING ACTIVITIES	21	35	53	12	∞
껖	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER	5	7	7	4	9
S.	(TO) SYSTEM ACTIVITIES PERFORMING GENERAL, SUPPLY AND FOUIPMENT ACTIVITIES	*	o	-	*	-
		n	`	 1		-

Note: Columns may not add to 100 percent due to rounding * Indicates less than 1 percent

RELATIVE PERCENT TIME SPENT ON DÚTY BY SPECIALTY JOBS TABLE 3 (CON'T)

Note: Columns may not add to 100 percent due to rounding * Indicates less than 1 percent

TABLE 4
SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	Firefighter Apprentice	Firefighter Job	TechTraining Instructor	First- Line
NUMBER IN GROUP PERCENT OF SAMPLE PERCENT ASSIGNED OVERSEAS	107 6% 25%	1213 63% 27%	42 2% 14%	Supervision 107 6% 25%
<u>DAFSC DISTRIBUTION:</u> 3E731 3E751 3E771 3E791	66 31 3	58 40 2 0	0 83 17 0	48 34 18 0
PAYGRADE DISTRIBUTION: E-1 to E-3 E-4 E-5 E-6 E-7 E-8 E-9	. 62 21 12 12 5 0 0	52 24 21 3 0 0	0 7 71 22 0 0	42 19 16 21 2 0
AVG MONTHS TAFMS PERCENT IN FIRST ENLISTMENT	49 71%	59	142 2%	83 56%
PERCENT SUPERVISING AVERAGE NUMBER OF TASKS PERFORMED	19% 58	28% 241	38% 114	40% 535

TABLE 4 (CON'T)
SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	Mngt Cluster	Course Mngt	Asst Chief – Tr	Asst Chief-	Fire Prot/ Prev Mngt
NUMBER IN GROUP PERCENT OF SAMPLE PERCENT A SSIGNED OVER SEAS	173 9%	5 .25%	2%	88 88 88,	11.
renceint Assigned Overseas	32%	20%	%67	39%	18%
DAFSC DISTRIBUTION:	-	-			
3E751	20	9	29	> 4	o
3E771	99	40	89	73	82
3E791	13	0	0	23	6
PAYGRADE DISTRIBUTION:					
E-1 to E-3	•	0	3	0	0
E-4	2	0	4	0	0
E-5	12	09	21	2	0
E-6	32	40	36	28	27
E-7	42	0	36	51	64
E-8	∞	0	0	. 13	6
E-9	3	0	0	9	0
AVG MONTHS TAFMS	197	201	165	216	206
PERCENT IN FIRST ENLISTMENT	1%	%0	4%	%0	%0
A. S. CORNER OF THE PROPERTY O					
PERCENT SUPERVISING AVERAGE NUMBER OF TASKS PERFORMED	77% 176	80% 62	901	92% 211	64% 189

TABLE 4 (CON'T)
SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	FACC OPERATOR JOB	FIRE INSPECTION JOB	LOGISTICS NCO JOB	FIRE EXTINGUISHER MAINT
NUMBER IN GROUP PERCENT OF SAMPLE PERCENT ASSIGNED OVERSEAS	124 6% 27%	36 2% 44%	18 1% 39%	JOB 9 1% 33%
DAFSC DISTRIBUTION: 3E731 3E751 3E771 3E791	39 58 3	0 64 36 0	5 78 17 0	44 56 0 0
PAYGRADE DISTRIBUTION: E-1 to E-3 E-4 E-5 E-6 E-7 E-8	32 36 27 4 1	0 6 55 28 11	5 11 67 17 0	12 44 44 0
E-9 AVG MONTHS TAFMS PERCENT IN FIRST ENLISTMENT	0 78 47	0 0 0 0	142	0 84 33
PERCENT SUPERVISING AVERAGE NUMBER OF TASKS PERFORMED	38%	36% 123	6%	33%

Comparison of Specialty Jobs to Previous Survey

Compared to the survey conducted in 1995, there are changes worth noting (Table 5). Three new jobs have been identified: Course Management, First-Line Supervision, and Fire Prevention/Protection Management. Although none of these titles may be clearly indicative of an actual duty title in the field, the mix of personnel and the type of work they perform aptly lend to the title given. An obvious change is the size of the jobs identified, in comparison to the last survey. This is a direct result of manning adjustments and civilian personnel not being included in the sample. Other changes include title adjustments and are merely semantic, based on analyst observations from the career field.

TABLE 5

SPECIALTY JOBS COMPARISON BETWEEN CURRENT AND 1995 SURVEYS

'EY		CT TO THE CHANGE A GRANT CONTRACTOR
CURRENT SURVEY	(N=1,925)	and and and

TECHNICAL TRAINING INSTRUCTOR JOB (N=42) FIREFIGHTER APPRENTICE JOB (N=107) FIREFIGHTER JOB (N=1,213)

FIRST-LINE SUPERVISION JOB (N=107)

MANAGEMENT CLUSTER (N=173)

Assistant Chief of Training Job (N=28) Course Management Job (N=5)

Assistant Chief of Operations Job (N=98)

FACC OPERATOR JOB (N=124)

FIRE INSPECTION JOB (N=36)

Fire Protection/Prevention Management Job (N=11)

FIRE EXTINGUISHER MAINTENANCE JOB (N=9) COGISTICS NCO JOB (N=18)

FIRE EXTINGUISHER MAINTENANCE JOB (N=32) FECHNICAL SCHOOL INSTRUCTOR JOB (N=12) APPRENTICE FIREFIGHTER JOB (N=3,171) Assistant Chief of Operations (N=290) SUPERVISORY CLUSTER (N=388) SUPPLY CUSTODIAN JOB (N=56) Assistant Chief of Training (N=66) FIRE INSPECTION JOB (N=210) FIREFIGHTER JOB (N=2,665) FACC CLUSTER (N=258) NOT IDENTIFIED Not Identified Not Identified 1995 SURVEY (N=4,249)

Summary

Structure analysis identified one cluster and eight jobs. The Firefighter Apprentice Job identifies the first stop for most firefighters in the career field. As time lends toward experience, personnel naturally transition into the Firefighter Job, where over 63 percent of the survey sample is distributed. As experience broadens and deepens, many members, in the latter portion of their second-term, work in the First-Line Supervision Job. It is here where they gain the knowledge required to eventually transition into the Management Cluster that includes jobs such as: Course Management Job, Assistant Chief of Training Job, Assistant Chief of Operations Job, and Fire Protection/Prevention Management Job. Other stops in the career of a firefighter may include: Technical Training Instructor Job, FACC Operator Job, Fire Inspection Job, Logistics NCO Job, and Fire Extinguisher Maintenance Job.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108, *Airman Classification* and the Career Field Education and Training Plan (CFETP) reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs is displayed in Table 6, while Table 7 offers another perspective by displaying the relative percent time spent on each duty across the skill-level groups. Tables 8 through 14 illustrate representative tasks performed by all skill levels.

Skill-Level Descriptions

<u>DAFSC 3E731</u>. Representing 48 percent of the survey sample, these 923 airmen perform an average of 206 tasks. Seventy-six percent of these airmen work in the Firefighter Job, and 8 percent work in the Firefighter Apprentice Job (see Table 6).

At the 3-skill level, 24 percent of their time is distributed among technical tasks within Duty B (Performing General Fire Protection Activities), 12 percent of their time is distributed in Duty K (Performing General Equipment Activities), and 11 percent of their time is allocated in Duty I (Performing Firefighting Vehicle Activities). Additionally, 10 percent of the time for DAFSC 3E731 personnel is spent in Duty C (Performing Fire Alarm Communications Center (FACC) Activities) (See Table 7).

Representative tasks performed by 3-skill level incumbents are listed in Table 8. Most tasks are technical in nature and deal with general firefighting activities, such as operating or using SCBA equipment, fire extinguishers, ladders, and hoses.

<u>DAFSC 3E751</u>. Representing 40 percent of the survey sample, these 767 airmen perform an average of 229 tasks. Sixty-three percent of these airmen work in the Firefighter Job and an additional 9 percent work in the FACC Operator Job.

At the 5-skill level, 17 percent of their time is distributed among technical tasks within Duty B (Performing General Fire Protection Activities), 11 percent of their time is spent with tasks in Duty C (Performing Fire Alarm Communications Center Activities), 9 percent of their time is distributed in Duty K (Performing General Equipment Activities). Additionally, 9 percent of their time is allocated in Duty I (Performing Firefighting Vehicle Activities) (See Table 7).

Representative tasks performed by 5-skill level incumbents are listed in Table 9. As with the 3-skill level members, most tasks are technical in nature and deal with general firefighting activities. It is also noted that similar tasks are performed by both groups, although there is slightly lower performance among the top tasks by the 5-skill level members.

The main difference between 3-skill level members and 5-skill level members is that most 3-skill level members spend slightly more time (24 percent) in Duty B (Performing General Fire Protection Activities), whereas 5-skill level members spend about 17 percent of their time in this area. Five-skill level members can also be seen making a transition into management and training activities (Duty P and Q), with a slight increase of about 5 percentage points in each respective area. Table 10 reflects those tasks which best differentiate 5-skill level personnel from their 3-skill level counterparts. This table only shows those tasks that 5-skill level members perform at a higher rate than 3-skill level members (this difference is expressed in a negative number). This is due to no tasks being deemed significantly higher (20 percent or more difference) for 3-skill level members, than 5-skill level members. From this data, it is observed that the only distinguishing differences between 3- and 5-skill level members is higher performance with elementary management and training tasks for the latter.

<u>DAFSC 3E771</u>. These 204 7-skill level personnel represent 11 percent of the survey sample and perform an average of 210 tasks. Unlike their junior counterparts at the 3- and 5-skill levels, 56 percent of these personnel are working in the Management Cluster. Within this cluster, 35 percent work in the Assistant Chief of Operations Job, and 9 percent serve in the Assistant Chief of Training Job. Fifteen percent work in the Firefighter Job (see Table 6).

Table 7 reflects the percent time spent on duties by DAFSC 3E771 personnel. Most of their time (27 percent) is spent Performing Management and Supervisory Activities of Duty P, with an additional 16 percent of their time spent Performing Training Activities within Duty Q.

Table 11 lists the most representative tasks performed by these airmen. Most of these involve management and supervisory functions. Table 12 shows the tasks that best differentiate between the 5- and 7-skill levels. As expected, the key difference is a much greater emphasis on higher management and supervisory functions at the 7-skill level, such as investigating accidents or incidents, scheduling TDYs, and conducting meetings.

<u>DAFSC 3E791</u>. These 19 nine-skill level personnel represent one percent of the survey sample and perform an average of 216 tasks. Unlike their junior counterparts at the 5- and 7-skill levels, 90 percent of these personnel are working in the Management Cluster, and none of these personnel perform any work in the Firefighter Job (see Table 6).

Table 7 reflects the percent time spent on duties by DAFSC 3E971 personnel. Similar to 7-skill level personnel, the majority of time for these personnel is spent Performing Management and Supervisory Activities of Duty P (55 percent). An additional 10 percent of their time is spent Performing Mobility and Contingency Activities within Duty O.

Table 13 lists the most time consuming tasks performed by these airmen. Most of these involve management-type functions. Table 14 shows tasks that best differentiate the 7- and 9-skill levels. As expected, the key difference is a much greater emphasis on management and

supervisory functions at the 9-skill level, with the most distinctive tasks involving budgeting functions.

Summary

Progression in this career ladder follows a somewhat regular pattern of technical job focus at the 3- and 5-skill levels, with a broadening into supervision and management at the 7- and 9-skill levels. An emphasis is clearly seen in performing general firefighting activities at the 3- and 5-skill levels. There is some broadening into supervisory functions at the 5-skill level noted. Members at the 7-skill level shift to supervisory jobs, but some job time is still spent in the technical areas as well. Nine-skill level members almost exclusively perform management and training activities.

TABLE 6

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS (PERCENT RESPONDING)

	DAFSC	DAFSC	DAFSC	DAFSC
•	3E731	3E751	3E771	3E791
SPECIALTY JOBS	(N=923)	(N=767)	(N=204)	(N=19)
Firefighter Apprentice Job	8	5	2	-
Firefighter Job	76	63	15	•
Technical Training Instructor Job	-	5	3	-
First-Line Supervision Job	5	5	9	-
Management Cluster	-	4	56	90
Course Management Job	-	-	1	-
Assistant Chief of Training Job	-	1	9	-
Assistant Chief of Operations Job	-	-	35	84
Fire Protection/Prevention Management Job	-	-	4	5
FACC Operator Job	5	9	2	-
Fire Inspection Job	-	3	6	-
Logistics NCO Job	-	2	2	-
Fire Extinguisher Maintenance Job	1	1	-	-
Not Grouped	5	3	5	10
Average Number of Tasks Performed	206	229	210	216
Percent of Survey Sample	48%	40%	11%	1%

TABLE 7

RELATIVE TIME SPENT ON DUTIES BY SKILL LEVEL PERSONNEL

		DAFSC	DAFSC	DAFSC	DAFSC
		3E731	3E751	3E771	3E791
DU	TIES	(N=923)	(N=767)	(N=204)	(N=19)
A.	PERFORMING FIRE PREVENTION ACTIVITIES	3	4	8	2
B.	PERFORMING GENERAL FIRE PROTECTION ACTIVITIES	24	17	8	2
C.	PERFORMING FIRE ALARM COMMUNICATIONS CENTER (FACC) ACTIVITIES	10	11	5	4
D.	FIGHTING AEROSPACE VEHICLE FIRES	5	5	2	1
E.	FIGHTING OR MITIGATING HAZARDOUS MATERIALS	5	5	6	5
2.	FIRES, SPILLS, OR LEAKS				
F.	FIGHTING STRUCTURAL FIRES	4	3	2	1
G.	FIGHTING WILDLAND FIRES	3	2	2	2
H.	FIGHTING MISCELLANEOUS FIRES	3	2	1	1
I.	PERFORMING FIREFIGHTING VEHICLE ACTIVITIES	11	9	3	*
J.	PERFORMING EMERGENCY VICTIM CARE AND RESCUE	7	7	3	1
	OPERATIONS				
K.	PERFORMING GENERAL EQUIPMENT ACTIVITIES	12	9	2	*
L.	MAINTAINING FIRE EXTINGUISHERS	2	2	1	-
M.	MAINTAINING OR OPERATING RUNWAY BARRIERS	2	2	1	*
N.	PERFORMING PRIME BASE ENGINEER EMERGENCY	· 1	1	1	2
	FORCE (BEEF) ACTIVITIES		_		
O.	PERFORMING MOBILITY AND CONTINGENCY	2	3	6	10
т.	ACTIVITIES PERFORMANCE MANAGEMENT AND SUPERMISORY	2	. 7	27	55
Ρ.	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	,	27	33
Q.	PERFORMING TRAINING ACTIVITIES	2	7	16	7
R.	PERFORMING GENERAL ADMINISTRATIVE AND	1	2	4	5
IX.	TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	1	4	7	5
S.	PERFORMING GENERAL SUPPLY AND EQUIPMENT	1	2	2	1
	ACTIVITIES	-	_	-	

NOTE: Columns may not add to 100 percent due to rounding

REPRESENTATIVE TASKS PERFORMED BY 3-SKILL LEVEL PERSONNEL

		PERCENT MEMBERS
TASKS		PERFORMING (N=923)
	•	
B119	Operate SCBAs	90
B86	Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers,	89
	or standpipes	
B93	Don or doff self-contained breathing apparatus while wearing protective clothing	88
B83	Carry ladders	87
B116	Operate fire hydrants	87
B120	Operate smoke ejectors or blowers	8 7
B84	Carry tools or equipment, other than hose lines, up or down ladders	86
B82	Carry hose lines up or down ladders	86
B92	Don or doff PPE for firefighting operations, other than hazardous materials	85
B126	Perform hose loads or finishes	83
K449	Clean firefighting vehicles	8 2
B115	Operate fire extinguishers	8 2
B118	Operate nozzles, such as adjustable gallonage, variable flow, or automatic	81
B98	Extend hose lines	81
B138	Raise or lower ladders, other than aerial ladders	81
B79	Advance hose lines	80
F304	Respond to structural fires	80
K450	Clean forcible entry tools	80
K458	Inspect SCBAs	79
B85	Carry victims up or down ladders	79
K448	Clean firefighting equipment, other than forcible entry tools	79
B137	Position and secure ladders, other than aerial ladders	78
B132	Perform ventilation procedures using positive pressure	77
K456	Inspect or maintain protective clothing	76
B146	Tie specific knots used in various firefighting operations	76
I362	Chock wheels on firefighting vehicles	76
B133	Perform ventilation procedures using powered equipment	76
F291	Attack and extinguish structural fires	76
K454	Inspect or maintain ladders	75
H343	Attack and extinguish miscellaneous Class-A fires	75

REPRESENTATIVE TASKS PERFORMED BY 5-SKILL LEVEL PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N= 767)
B119	Operate SCBAs	80
B93	Don or doff self-contained breathing apparatus while wearing protective clothing	78
B92	Don or doff PPE for firefighting operations, other than hazardous materials	77
K458	Inspect SCBAs	75
B120	Operate smoke ejectors or blowers	74
K456	Inspect or maintain protective clothing	74
B84	Carry tools or equipment, other than hose lines, up or down ladders	74
K449	Clean firefighting vehicles	74
B83	Carry ladders	74
B116	Operate fire hydrants	73
B86	Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers, or standpipes	72
K451	Demonstrate operation of firefighting equipment	71
K455	Inspect or maintain powered equipment	71
B126	Perform hose loads or finishes	71
B115	Operate fire extinguishers	71
B138	Raise or lower ladders, other than aerial ladders	70
K450	Clean forcible entry tools	70
B98	Extend hose lines	70
K448	Clean firefighting equipment, other than forcible entry tools	70
B82	Carry hose lines up or down ladders	70
K453	Inspect or maintain forcible entry tools	70
B146	Tie specific knots used in various firefighting operations	70
K466	Maintain station facilities	69
K454	Inspect or maintain ladders	69
I 370	Inspect fire department vehicles	69
B79	Advance hose lines	69
F304	Respond to structural fires	69
I367	Drive or operate firefighting vehicles, other than during emergency operations	69
I366	Document vehicle deficiencies	68
B133	Perform ventilation procedures using powered equipment	68

TASKS WHICH BEST DIFFERENTIATE BETWEEN 3- AND 5-SKILL-LEVEL PERSONNEL (PERCENT MEMBERS PERFORMING)

		DAFSC 3F731	DAFSC 3F751	
TASKS		(N=923)	(N=767)	DIFF
0806	Counsel trainees on training progress	«	40	171
200			-	1
0816	Evaluate progress of trainees	9	44	-38
P731	Inspect personnel for compliance with military standards	6	44	-35
Q822	Monitor student progress in career development courses	7	41	-34
P770	Write or endorse military performance reports	5	38	-33
Q820	Maintain training records or files	6	42	-33
P771	Write recommendations for awards or decorations	5	38	-33
Q831	Write training reports	25	58	-33
Q794	Conduct ongoing proficiency training	13	45	-32
P661	Conduct task evaluations	∞	40	-32
P660	Conduct supervisory performance feedback sessions	9	37	-31
P732	Interpret policies, directives, or procedures for subordinates	9	36	-30
P664	Counsel subordinates concerning personal matters	7	36	-29
0800	Conduct vehicle operator training or certification	18	47	-29
9220	Brief personnel concerning training programs or matters	7	35	-28
P687	Draft duty rosters	9	32	-26
0798	Conduct structural firefighting training	16	42	-26

REPRESENTATIVE TASKS PERFORMED BY 7-SKILL LEVEL PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N= 204)
P731	Inspect personnel for compliance with military standards	79
P771	Write recommendations for awards or decorations	77
P716	Evaluate personnel for compliance with performance standards	72
P770	Write or endorse military performance reports	72
P732	Interpret policies, directives, or procedures for subordinates	71
P660	Conduct supervisory performance feedback sessions	71
P664	Counsel subordinates concerning personal matters	70
P661	Conduct task evaluations	69
P717	Evaluate personnel for promotion, demotion, reclassification, or special awards	68
P709	Evaluate emergency response procedures	66
P729	Initiate actions required due to substandard performance of personnel	66
B88	Determine appropriate personal protection equipment for firefighting operations, other than hazardous materials	66
Q806	Counsel trainees on training progress	65
P657	Conducts self-inspections or self-assessments	65
Q784	Conduct egress training from aircraft, buildings, or towers	64
P659	Conduct supervisory orientations for newly assigned personnel	64
E279	Initiate actions in accordance with local emergency response plans, SOPs, or DOT Guidebook	64
E284	Respond to hazardous material incident sites	64
Q816	Evaluate progress of trainees	63
Q776	Brief personnel concerning training programs or matters	63
Q794	Conduct ongoing proficiency training	63
P676	Develop or establish work schedules	63
Q795	Conduct pre-exercise training	63
E280	Interpret placards or markings on transport vehicles	63
P728	Improve work methods	62
Q831	Write training reports	62
Q796	Conduct safety training	62
P669	Determine or establish work assignments or priorities	62
B94	Ensure compliance with pre-incident plans	62
B87	Determine appropriate agents for firefighting operations	62

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN 5- AND 7-SKILL-LEVEL PERSONNEL (PERCENT MEMBERS PERFORMING)

204) DIFF	50	50	50	49	48	48	48	47	46	46	46	-52	-47	-45	-44	-43	-41	-41	-40	-40	-40	-39
3E / / 1 (N=204)	24	24	21	25	22	22	22	23	25	23	17	99	59	54	51	53	51	59	52	47	89	55
3E751 (N=767)	74	74	71	74	70	70	70	70	71	69	63	14	12	6	7	10	10	18	. 12	7	28	91
	Carry ladders	Clean firefighting vehicles	Perform hose loads or finishes	Carry tools or equipment, other than hose lines, up or down ladders	Carry hose lines up or down ladders	Clean forcible entry tools	Clean firefighting equipment, other than forcible entry tools	Inspect or maintain forcible entry tools	Inspect or maintain powered equipment	Advance hose lines	Operate vehicle pump controls	Evaluate emergency response procedures	Investigate accidents or incidents	Conduct post-incident analysis of fire incidents	Coordinate fire-scene photography with base photo labs	Schedule personnel for temporary duty assignments, leaves, or passes	Evaluate effectiveness of firefighting accountability systems	Direct emergency operations as on-scene commander	Evaluate fire station facilities	Conduct post-incident analysis of hazardous materials incidents	Evaluate personnel for promotion, demotion, reclassification, or special awards	Recommend personnel for training by outside training agencies
FASKS	B83	K449	B126	B84	B82	K450	K448	K453	K455	B79.	1381	P709	P734	P654	A16	P765	P708	P684	P712	P655	P717	Q827

REPRESENTATIVE TASKS PERFORMED BY 9-SKILL LEVEL PERSONNEL

		PERCENT
		MEMBERS
		PERFORMING
TASKS		(N=19)
P711	Evaluate fire protection programs	100
P709	Evaluate emergency response procedures	. 100
P716	Evaluate personnel for compliance with performance standards	95
P731	Inspect personnel for compliance with military standards	95
P763	Review drafts of supplements or changes to directives, such as policy	95
	directives, instruction, or manuals	
P685	Draft budget requirements	95
P648	Analyze budget requirements	95
P652	Compare cost estimates for acquisitions of equipment	95
P762	Draft budget requirements	95
P766	Write fiscal year budget projections	95
P713	Evaluate inspection report findings or inspection procedures	89
P703	Evaluate administrative procedures	89
P710	Evaluate fire prevention programs	89
P708	Evaluate effectiveness of firefighter accountability systems	89
P771	Write recommendations for awards or decorations	89
P695	Establish organizational policies, such as OIs or SOPs	89
P653	Conduct general meetings, such as staff meetings, briefings, conferences, or	89
	workshops	
P706	Evaluate budget options	89
P683	Develop self-inspection or self-assessment program checklists	89
P764	Review mobility, contingency, disaster preparedness, or unit emergency alert	89
	plans	
P758	Prioritize budget requirements	89
P657	Conduct self-inspections or self-assessments	89
A63	Research fire protection publications	89
P765	Schedule personnel for temporary duty	89
P722	Gather risk management data	89
P768	Write job or position descriptions	89
P712	Evaluate fire station facilities	84
P686	Draft correspondence, other than for training	84
P770	Write or indorse military performance reports	84
P696	Establish performance standards for subordinates	84

TABLE 14

TASKS WHICH BEST DIFFERENTIATE BETWEEN 7- AND 9-SKILL-LEVEL PERSONNEL (PERCENT MEMBERS PERFORMING)

3E791 (N=19) DIFF	0 45	0 38	16 37												8467						
																				-	
3E771 (N=204)	45	38	53	52	62	40	33	64	. 42	37	21	25	15	26	17	22	27	17	11	28	20
	Personalize lesson plans Evacuate nersonnel from areas	Maintain training equipment	Maintain training records or files	Conduct aircraft egress systems training	Write training reports	Conduct drafting exercises	Operate fire extinguishers	Conduct egress training from aircraft, buildings, or towers	Draft duty roster	Document vehicle deficiencies	Write fiscal year budget projections	Compare cost estimates for acquisition of equipment	Maintain manpower authorization documents	Draft budget requirements	Develop plans for disaster preparedness	Evaluate budget options	Analyze budget requirements	Procure funding	Evaluate contracts, such as maintenance	Review budget requirements	Formulate manpower requirements
TASKS	Q824 B97	0819	Q820	Q778	Q831	Q783	B115	Q784	P687	1366	b 266	P652	R851	P685	P678	P706	P648	P759	P707	P762	P721

TRAINING ANALYSIS

Occupational survey data are one of many sources of information that can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors that may be used in evaluating training include the overall description of the job being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-job (1-24 months TAFMS) or first-enlistment (1-48 months TAFMS) members performing specific tasks, as well as TE and TD ratings (previously explained in the **SURVEY METHODOLOGY** section).

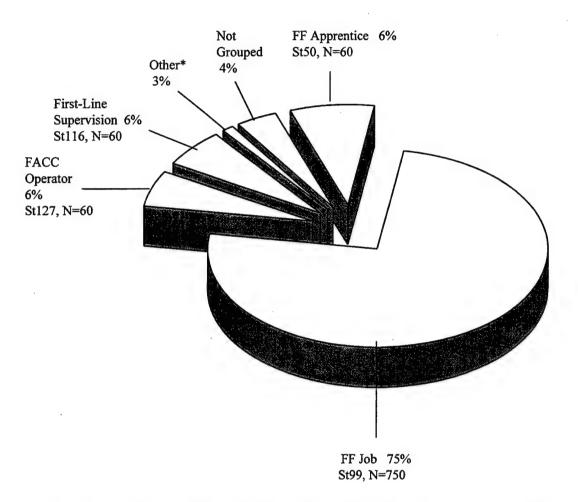
First-Enlistment Personnel

In this study, there are 998 members in their first enlistment (1-48 months TAFMS), representing 52 percent of the total survey sample. Figure 2 illustrates the majority of first-enlistment personnel (75 percent) working in the Firefighter Job. Most of their duty time is spent Performing General Fire Protection Activities (Duty B), Performing General Equipment Activities (Duty K), Performing Firefighting Vehicle Activities (Duty I), and Performing Fire Alarm Communications Center Activities (Duty C). Table 15 displays the relative percent of time spent on duties by first-enlistment personnel.

Table 16 lists tasks that are performed by 70 percent or more of first-enlistment personnel. Most commonly performed tasks by first-enlistment personnel involve operating, performing, cleaning, or inspecting various types of equipment, gear, or tools.

Table 17 lists the various vehicles, emergency victim care, and fire suppression equipment frequently used by first-enlistment personnel. Table 18 lists the various types of fire protection equipment used by first-enlistment personnel. Most commonly used fire protection equipment by all first-enlistment personnel includes: firehoses, Spanner Wrenches, ropes, roof ladders, and Pike Poles.

AFSC 3E7X1 FIRST-ENLISTMENT SPECIATY JOBS (N=998)



^{*}Other includes Technical Training Instructor (1 percent), Fire Extinguisher Maintenance (1 percent), and Logistics NCO (1 percent)

Figure 2

RELATIVE TIME SPENT ON DUTIES BY FIRST-ENLISTMENT PERSONNEL

		1ST ENL
	DUTIES	(N=998)
A.	PERFORMING FIRE PREVENTION ACTIVITIES	3
B.	PERFORMING GENERAL FIRE PROTECTION ACTIVITIES	24
C.	PERFORMING FIRE ALARM COMMUNICATIONS CENTER (FACC) ACTIVITIES	11
D.	FIGHTING AEROSPACE VEHICLE FIRES	5
E.	FIGHTING OR MITIGATING HAZARDOUS MATERIALS FIRES, SPILLS, OR LEAKS	5
F.	FIGHTING STRUCTURAL FIRES	4.
G.	FIGHTING WILDLAND FIRES	3
H.	FIGHTING MISCELLANEOUS FIRES	3
I.	PERFORMING FIREFIGHTING VEHICLE ACTIVITIES	11
J.	PERFORMING EMERGENCY VICTIM CARE AND RESCUE OPERATIONS	7
K.	PERFORMING GENERAL EQUIPMENT ACTIVITIES	12
L.	MAINTAINING FIRE EXTINGUISHERS	2
M.	MAINTAINING OR OPERATING RUNWAY BARRIERS	2
N.	PERFORMING PRIME BASE ENGINEER EMERGENCY FORCE (BEEF) ACTIVITIES	1
O.	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	2
P.	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1
Q.	PERFORMING TRAINING ACTIVITIES	2
R.	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO)	1
	SYSTEM ACTIVITIES	
S.	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT PERSONNEL

m a ove		PERCENT MEMBERS PERFORMING
TASKS		(N= 998)
B119	Operate SCBAs	90
B86	Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers,	88
	or standpipes	
B83	Carry ladders	88
B93	Don or doff self-contained breathing apparatus while wearing protective	87
	clothing	
B116	Operate fire hydrants	87
B84	Carry tools or equipment, other than hose lines, up or down ladders	86
B82	Carry hose lines up or down ladders	86
B120	Operate smoke ejectors or blowers	86
B92	Don or doff PPE for firefighting operations, other than hazardous materials	85
B126	Perform hose loads or finishes	83
K449	Clean firefighting vehicles	82
B115	Operate fire extinguishers	82
B118	Operate nozzles, such as adjustable gallonage, variable-flow, or automatic	81
B98	Extend hose line	81
B138	Raise or lower ladders, other than aerial ladders	81
B79	Advance hose lines	80
K450	Clean forcible entry tools	79
F304	Respond to structural fires	79
B85	Carry victims up or down ladders	79
K458	Inspect SCBAs	79
K448	Clean firefighting equipment, other than forcible entry tools	78
B137	Position and secure ladders, other than aerial ladders	78
B132	Perform ventilation procedures using positive pressure	77
B146	Tie specific knots used in various firefighting operations	77
1362	Chock wheels of firefighting vehicles	76
K456	Inspect or maintain protective clothing	76
K454	Inspect or maintain ladders	76
B133	Perform ventilation procedures using powered equipment	76
B145	Tie rescue knots to victims or mannequins	76
F291	Attack or extinguish structural fires	75
K451	Demonstrate operation of firefighting equipment	74
K455	Inspect or maintain powered equipment	74
B134	Perform ventilation procedures using water fog patterns	74
K453	Inspect or maintain forcible entry tools	73
B129	Perform master stream operations	72

VEHICLES/EQUIPMENT USED OR OPERATED BY FIRST-ENLISTMENT PERSONNEL (PERCENT MEMBERS RESPONDING)

	TOTAL
	1ST
	ENL
VEHICLES	(N=998)
P-19 ARFF Vehicles	84
P-23 ARFF Vehicles	68
P-22 Engines	62
P-20 Dual-Agent Vehicles	59
P-24 Engines	55
Hazardous Materials Vehicles/Trailers	50
P-18 Resupply Vehicles	48
P-26 Resupply Vehicles	44
P-10 Light Rescue Vehicles	40
General Transport Vehicles	38
•	
EMERGENCY VICTIM CARE EQUIPMENT	
Backboard/Slideboards	71
Portable Radios	66
Dressings and Bandages	65
Cervical Collars	63
Blood Pressure Cuffs	56
Blankets	56
Advance First Aid Kits	52
Barrier Shields/Pocket Masks	48
Stethoscopes	45
Oxygen Inhalation Units	41
FIRE SUPRESSION/DETECTION SYSTEM EQUIPMENT	
Smoke Detectors	89
Standpipe Systems	88
Sprinkler Heads	86
AFFF Extinguishing systems	84
Heat Detectors	83
Auto Fire Alarms	82
Wet/Dry Pipe Sprinkler Systems	80
Dry Chemical Systems	76
Fire Pumps	73
Manual Fire Alarm Equipment	68
Deluge Systems	68
Indicating Valves	56
Preaction Sprinkle Systems	56

FIRE PROTECTION EQUIPMENT USED OR OPERATED BY FIRST-ENLISTMENT PERSONNEL (PERCENT MEMBERS RESPONDING)

	TOTAL
	1ST
	ENL
FIRE PROTECTION EQUIPMENT	(N=998)
Firehoses – Large Diameter (Supply Line)	92
Firehoses – Booster through 3-inch	91
Spanner Wrenches	91
Ropes	91
Roof ladders	91
Pike Poles	91
Nozzles	91
Smoke Ejectors or Blowers	90
Salvage Covers	90
Hydrant Wrenches	90
Ear Protectors	89
Extension Ladders	89
Haligan Tools	89
Pickhead Axes	89
Bolt Cutters	88
Hose Straps	88
Nomex Hoods	88
Portable Generators	88
Portable Lights	88
Crash Protective Clothing	87
Hose Clamps	. 87
Portable radios	87
Self-Contained Breathing Apparatus	87
Wheel Chocks	87
Rescue Saws	86
Crash Axes	85
Rescue Saws	85
Shovels	85
Attic Ladders	84
Chain Saws	84
Crowbars/Door Openers	84
Ground Ladders	84
Hydraulic Rescue Tools	84
Master Stream Devices (Deck Guns)	83
Auxiliary Generators	82
Personnel Alert Safety System Devices	82

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-enlistment personnel training, along with a measure of the difficulty of the JI tasks. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages of members performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, AFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in AETCI 36-2601, and allows course personnel to quickly focus their attention on those tasks which are most likely to qualify for initial resident course consideration.

Table 19 presents tasks with the highest TE ratings for AFSC 3E7X1 first-enlistment airmen. Fifty-three raters provided input for TE ratings. An average TE rating is 2.66, with a standard deviation of 2.01, making a high TE rating (avg. + 1 SD) equal to 4.67. For example, TE raters (refer to Table 19) reported that tasks such as donning or doffing SCBAs while wearing protective clothing requires a lot of training emphasis and, from the data, many airmen in their first job and within their first enlistment are performing this task. Table 20 displays those tasks that 44 AFSC 3E7X1 raters judged to be most difficult to learn how to do. An average TD rating is 5.0, with a standard deviation of 1.0, making a high TD rating (avg. + 1 SD) equal to 6.0. Table 20 shows TD raters reported tasks associated with estimating and evaluating HAZMAT incidents to be some of the most difficult tasks to learn.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate, ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the SURVEY METHODOLOGY section of this report.)

TABLE 19

TASKS WITH HIGHEST TRAINING EMPHASIS

PERCENT MEMBERS PERFORMING

TASKS		TNG EMP*	1ST JOB (N=534)	1ST ENL (N=998)	TSK DIF**
6					
B93	Don or doff self-contained breathing apparatus while wearing protective clothing	2.68	68	87	3.25
F291	Attack and extinguish structural fires	7.58	78	9/	5.85
B119	Operate SCBAs	7.57	92	06	3.74
B92	Don or doff PPE for firefighting operations, other than hazardous materials	7.51	98	85	3.19
B140	Search for victims in burning, smoke-filled, or hostile environment	7.49	69	71	5.80
F299	Perform offensive firefighting tactics on structural fires	7.17	72	71	5.49
D211	Attack and extinguish aerospace vehicle fires	7.17	33	37	5.82
B85	Carry victims up or down ladders	7.13	78	62	4.19
D233	Rescue personnel from aerospace vehicles	7.08	40	43	5.83
F295	Make forcible entries into buildings	7.08	9/	74	4.56
B86	Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers, or	7.00	06	88	3.03
	standpipes				
B83	Carry ladders	7.00	68	88	2.99
B82	Carry hose lines up or down ladders	86.9	87	98	3.23
D241	Safety aircraft systems, such as canopy jettison, egress, or weapons	86.9	49	52	5.87
B84	Carry tools or equipment, other than hose lines, up or down ladders	96.9	87	98	3.18
D226	Perform defensive firefighting tactics on aerospace vehicle fires	6.92	38	41	4.78
F294	Hoist hose lines or equipment to upper stories or roofs	6.92	75	73	4.35
F297	Perform defensive firefighting tactics on structural fires	6.92	72	70	4.64
D237	Respond to aerospace vehicle fires	6.92	43	45	4.54

* Mean TE Rating is 2.66, and Standard Deviation is 2.01 (High TE = 4.67)
** Average TD Rating is 5.00, and Standard Deviation is 6.00 (High TD = 6.00)

TABLE 20

TASKS WITH HIGHEST TASK DIFFICULTY

PERCENT MEMBERS PERFORMING

TASKS		TASK DIFF**	1ST JOB (N=534)	1ST ENL (N=998)	3-SKL LVL (N=923)	5-SKL LVL (N=767)	7-SKL LVL (N=204)	TNG EMP*
A8 A26	Conduct fire investigations Estimate requirements for fire protection systems	8.51	13	13	14	12	50	30
E273	Estimate potential course and harm of hazardous materials incidents	7.64	19	21	21	27	54	3.23
E272	Estimate behaviors of hazardous materials	7.55	20	22	22	28	52	3.26
A13	Conduct new construction fire safety acceptance inspections	7.52	7	9	7	2	17	.28
E264	Develop plans of action for hazardous materials incidents	7.43	14	19	18	24	50	1.94
E267	Develop techniques to prevent hazardous materials fires	7.39	13	12	12	11	38	1.06
A65	Review or approve design drawings or new construction plans	7.39	9	5	2	S	15	.26
0,01		1						
F768	Direct resources during hazardous materials incidents	7.38	13	15	14	22	58	1.68
E265	Develop response plans for hazardous materials incidents	7.34	10	11	11	14	53	1.04
E266	Develop response plans to prevent hazardous materials, spills, or leaks	7.32	_	12	12	12	44	1.00
A7	Conduct construction in-progress inspections	7.11	9	9	9	∞	18	.55
E289	Size up or evaluate hazardous materials spills or leaks	96.9	22	79	76	41	59	3.55
P684	Direct emergency operations as on-scene commander	6.93	2	9	9	18	59	1.04
E275	Evaluate hazardous materials defensive control functions	6.91	16	19	18	24	55	2.77
A46	Inspect space shuttle facilities	88.9	3	3	3	_	_	.57
E250	Attack and extinguish oil well fires	6.85	34	34	35	15	9	3.45

^{*} Mean TE Rating is 2.66, and Standard Deviation is 2.01 (High TE = 4.67) ** Average TD Rating is 5.00, and Standard Deviation is 1.00 (High TD = 6.00)

⁴⁸

Specialty Training Standard (STS)

A comprehensive review of STS 3E7X1, dated July 1998, compared STS items to survey data. Technical school personnel from Goodfellow AFB, TX matched JI tasks to appropriate sections and subsections of the STS.

Typically, STS sections and subsections matched to tasks which have sufficiently high TE and TD ratings and are performed by at least 20 percent of the personnel in appropriate experience or skill-level groups (such as first enlistment (1-48 TAFMS) and 5- and 7-skill level groups), are considered to be supported and should be considered for inclusion in the STS. Likewise, paragraphs having tasks with less than 20 percent performing across all the criterion groups should be considered for deletion from the STS.

STS paragraphs containing general knowledge information and basic supervisory responsibilities were not examined. Task knowledge and performance elements of the STS were compared against the standards set forth in AETCI 36-2601 and AFI 36-2623 (i.e., include tasks performed or knowledge required by 20 percent or more of the personnel in a skill level [criterion group] of the AFSC).

Overall, the STS is very well supported. Only 5 areas, all within the General Contingency Responsibilities portion of the STS, did not have the 20 percent support needed. These non-supported areas and their matched tasks are listed in Table 21. It is recommended that these five areas and the entire document be reviewed, in order to validate the findings and make necessary adjustments.

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. Examples of technical tasks performed by 20 percent or more respondents of the STS target groups, but which were not referenced to any STS element, are displayed in Table 22. Training personnel and SMEs should consider these type of tasks not referenced to determine if inclusion in the STS is justified.

TABLE 21

EXAMPLE OF STS ELEMENTS NOT SUPPORTED BY CRITERION GROUP SURVEY DATA (LESS THAN 20 PERCENT MEMBERS PERFORMING)

 ^{*} Mean TE rating is 2.66, and the Standard Deviation is 2.01 (High TE = 4.67)
 ** Mean TD rating is 5.00, and the Standard Deviation is 1.00 (High TD = 6.00)

TABLE 22

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE GROUP MEMBERS AND NOT REFERENCED TO THE STS

			PERCEN	r member	PERCENT MEMBERS PERFORMING	ING		
		1ST	1ST	DAFSC	DAFSC	DAFSC	TNG	TSK
TASKS		10B	ENT	<u>3E731</u>	<u>3E751</u>	<u>3E771</u>	EMP*	DIFF**
F294	Hoist hose lines or equipment to upper stories or roofs	75	73	73	64	23	6.92	4.35
1385	Perform fire vehicle relay operation	51	99	. 95	52	15	4.89	5.41
1387	Perform operator maintenance on firefighting vehicles or	41	20	20	61	19	5.42	4.48
	mounted equipment							
1393	Resupply firefighting vehicles during incidents	63	99	<i>L</i> 9	62	23	6.34	4.59
K458	Inspect SCBAs	80	6/	79	75	40	6.40	4.17
1378	Operate auxiliary cooling or winterization systems on	51	27	99	55	13	4.42	4.26
	firefighting vehicles							
K460	Maintain emergency medical tools or equipment	20	55	55	55	16	4.51	4.44
B79	Advance hose lines	82	80	80	69	23	6.91	3.03
B97	Evacuate personnel from areas	53	27	57	64	49	5.98	3.55
B125	Perform hand signals	27	27	57	52	25	4.70	3.07
B126	Perform hose loads or finishes	85	83	83	71	21	6.45	2.88

^{*} Mean TE rating is 2.66, and the Standard Deviation is 2.01 (High TE = 4.67) ** Mean TD rating is 5.00, and the Standard Deviation is 1.00 (High TD = 6.00)

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet to provide indications of job satisfaction.

Table 23 presents job satisfaction data for AFSC 3E7X1 TAFMS groups, together with TAFMS data for a comparative sample of direct support career ladders surveyed in 1997. A first look at the data indicates a high level of job satisfaction across all TAFMS groups. In general, members find their service to the career-field interesting, with their talents and training being well-utilized. In addition, a positive level of accomplishment is gained from their efforts. This leads to the illogical conclusion of low re-enlistment intentions, especially when compared to the comparative sample of direct support career fields.

A closer look at first-enlistment personnel (1-48 Months TAFMS) shows a positive 7 percentage point difference in expressed job interest between firefighters and the comparative group, the largest disparity for this category. As well, there is a similar positive difference in perceived use of talents, in comparison to the other two TAFMS groups. When training utilization is responded to, there is no difference between the two groupings of young airmen. The sense of accomplishment gained from work is equal to the comparative group, yet lower than the previous indicators. The somewhat shocking figure is the intent to re-enlist of this young and future workforce of the career field. A dismal 38 percent, compared to the 51 percent of the comparative career fields.

Second-enlistment personnel (49-96 Months TAFMS) more closely match their direct support career field counter parts in expressed job interest and perceived utilization of talents and training. They did indicate a negative 11 percentage point difference in the sense of accomplishment they gain from their work, as well as a wide 16 percentage point difference in intent to re-enlist. A 52 percent indication of re-enlistment intent is also alarming for second-enlistment personnel, the grouping that represents tomorrow's leadership and management.

Career airmen (97+ Months TAFMS) represent the most satisfied grouping of airmen across all indicators. In relation to the comparative sample, they also responded more positively, with the exception of a negative 5-percentage point difference for re-enlistment intent.

An indication of how job satisfaction perceptions have changed over time is provided in Table 24, where again TAFMS data for 1997 survey respondents are presented, along with data from respondents in the last OSR from 1995. Reviewing this table, it is apparent that job satisfaction has remained relatively high and stable over the past few years. By far, the biggest changes were to be found in the area of intent to re-enlist among first- and second-enlistment personnel. A dramatic negative 21-percentage point difference is to be found among first-term personnel, and an even larger negative 23-percentage point difference among second-term

personnel. Sample size difference and composition may be a partial explanation for this disparity.

In Table 25, review of the job satisfaction data for personnel in the specialty jobs identified that airmen working in the Firefighter Job, Technical Training Instructor Job, First-Line Supervision Job, Management Cluster Jobs, and the Fire Inspector Job responded most positively to job satisfaction indicators.

When there are problems in a career ladder, survey respondents are free with write-in comments to complain about these perceived problems. Thirty percent of the survey sample used the write-in feature to convey some type of information, ranging from career-field criticisms and praise to identifying background questions and tasks that could have been added or deleted from the survey. Some criticisms were directed at local training programs, and the lack of needed training that should occur on-the-job. Additional criticism cited the 72-hr work-week as being a burden on family life, lack of appropriate compensation, and a large amount of contingency activity. Some respondents correlated these perceived problems as the underlying factor behind personnel leaving the Air Force after their first-enlistment. There were positive comments noted as well, to include general statements about the superior training received at Goodfellow AFB, TX and how members believe this to be "the best job in the Air Force."

TABLE 23

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS (PERCENT MEMBERS RESPONDING)

	1-48 MO	1-48 MOS TAFMS	49-96 MO	49-96 MOS TAFMS	97+ MO	97+ MOS TAFMS
	1998	COMP	1998	COMP	8661	COMP
	3E7X1	SAMPLE*	3E7X1	SAMPLE*	3E7X1	SAMPLE*
	(N=998)	(N=1,204)	(N=275)	(N=674)	(N=652)	(N=2,014)
EXPRESSED JOB INTEREST:						
INTERESTING	92	69	74	74	80	79
SO-SO	13	17	13	15	13	13
DOLL	11	14	13	111	7	∞
PERCEIVED UTILIZATION OF TALENTS						
FAIRLY WELL TO PERFECT	81	72	81	80	68	84
NOT AT ALL/VERY LITTLE	19	28	16	20	111	16
PERCEIVED UTILIZATION OF TRAINING						·
FAIRLY WELL TO PERFECT	85	85	82	80	68	80
NOT AT ALL/VERY LITTLE	15	15	18	20	11	20
SENSE OF ACCOMPLISHMENT GAINED FROM WORK						
SATISFIED	89	89	62	73	92	74
NEUTRAL	12	14		11	∞	6
DISSATISFIED	20	18	27	16	16	17
RE-ENLISTMENT INTENTIONS						
YES, OR PROBABLY YES	38	51	52	89	69	74
NO, OR PROBABLY NO	62	49	48	32	14	∞
WILL RETIRE	0	0	0	0	17	18

^{**} Comparative sample of direct support career ladders surveyed in 1997 (includes 1T0X1, 1T1X1, 1W0X1/A, 2R0X1, 2R1X1, 2T3X1, 2T3X2A/B, 2T3X3, 2T4X1, 2T4X2, 2T0X1, 2T1X1, 2T2X2, 2F0X1, 2S0X2, 2V0X1, 2V0X2, 2V0X3, 3V1X1, 3C0X1, 3C0X2, 3C1X1, 3C1X2, 3C2X1, 3C3X1, 3E0X1, 3E0X1, 3E1X1, 3E2X1, 3E4X1, 3E4X2, 3E4X3, 3E5X1, 3E6X1, 3P0X1, 3P0X2/A, 3P1X1/A)

TABLE 24

COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY BY TAFMS GROUPS (PERCENT MEMBERS RESPONDING)

	1-48 MO	I-48 MOS TAFMS	49-96 T	49-96 TAFMS	97+ MO	97+ MOS TAFMS
	8661	1995	1998	1995	1998	1995
	3E7X1	3E7X1	3E7X1	3E7X1	3E7X1	3E7X1
	(86=N)	(N=1,869)	(N=275)	(N=735)	(N=652)	(N=1,045)
EXPRESSED JOB INTEREST:						
INTERESTING	9/	78	74	73	80	92
SO-SO	13	13	13	16	13	13
DULL		6	13	11	7	11
PERCEIVED UTILIZATION OF TALENTS	;					
FAIRLY WELL TO PERFECT	 	82	81	4	68	83
NOT AT ALL/VERY LITTLE	19	18	19	21	11	17
PERCEIVED UTILIZATION OF TRAINING						
FAIRLY WELL TO PERFECT	85	88	82	84	68	82
NOT AT ALL/VERY LITTLE	15	12	18	16	11	18
SENSE OF ACCOMPLISHMENT GAINED FROM WORK						
SATISFIED	89	71	62	69	9/	70
NEUTRAL	12	13	11	10	∞	6
DISSATISFIED	20	16	27	21	16	21
RE-ENLISTMENT INTENTIONS						
YES, OR PROBABLY YES	38	59	52	75	69	74
NO, OR PROBABLY NO	62	41	48	25	14	10
WILL RETIRE	0	0	0	0	17	16

TABLE 25

COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS (PERCENT MEMBERS RESPONDING)

	FIRE	FIRE	TECHNICAL	FIRST-LINE
	FIGHTER	FIGHTER	TRAINING	SUPERVISION
	APPRENT	JOB	INSTRUCTOR	JOB
	JOB	(ST119,	JOB	(ST116, N=107)
	(ST50, N=107)	N=1213)	(GP42, N=42)	
EXPRESSED JOB INTEREST:				
INTERESTING	63	77	80	81
SO-SO	24	13	10	9
DULL	13	10	10	13
PERCEIVED UTILIZATION OF TALENTS				
FAIRLY WELL TO PERFECT	75	83	88	81
NOT AT ALL/VERY LITTLE	25	17	12	19
PERCEIVED UTILIZATION OF TRAINING				
FAIRLY WELL TO PERFECT	82	85	95	82
NOT AT ALL/VERY LITTLE	18	15	\$	18
SENSE OF ACCOMPLISHMENT GAINED FROM WORK				
SATISFIED	55	70	83	61
NEUTRAL	13	10	S	15
DISSATISFIED	32	20	12	24
RE-ENLISTMENT INTENTIONS				
YES, OR PROBABLY YES	35	49	69	53
NO, OR PROBABLY NO	64	49	21	39
WILL RETIRE	_	2	10	8

TABLE 25 (CON'T)

COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS (PERCENT MEMBERS RESPONDING)

EYDDESSEN IOD INTEDEST.	COURSE MNGT JOB (ST128, N=5)	ASST CH OF TRAINING JOB (ST205, N=28)	ASST CH OF OPS JOB (ST129, N=98)	FIRE PROT/PREV MNGT (ST120, N=11)
INTERESTING SO-SO DULL	80 20 0	. 89 7 4	89	82 0 18
PERCEIVED UTILIZATION OF TALENTS FAIRLY WELL TO PERFECT NOT AT ALL/VERY LITTLE	80	96	97	100
PERCEIVED UTILIZATION OF TRAINING FAIRLY WELL TO PERFECT NOT AT ALL/VERY LITTLE	80 20	100	98	100
SENSE OF ACCOMPLISHMENT GAINED FROM WORK SATISFIED NEUTRAL DISSATISFIED	80 20 0	88 0 11	89 5 6	91 0 9
RE-ENLISTMENT INTENTIONS YES, OR PROBABLY YES NO, OR PROBABLY NO WILL RETIRE	0 0 40	72 14 14	53 42	55 0 45

TABLE 25 (CON'T)

COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS (PERCENT MEMBERS RESPONDING)

LOGISTICS NCO JOB (ST112, N=18)	78 11 11	89	72 2 8	83 6 11	83 17 0
FIRE INSPECTION JOB (ST172, N=36)	84 8 8	89	92	72 6 22	67 19 14
FIRE EXTINGUISHER MAINT JOB (ST1102, N=9)	56 22 22	78 22	89	56 11 33	33 56 11
FACC OPERATOR JOB (ST127, N=124)	71 18 111	77 23	77 23	69 14 17	52 44 4
	EXPRESSED JOB INTEREST: INTERESTING SO-SO DULL	PERCEIVED UTILIZATION OF TALENTS FAIRLY WELL TO PERFECT NOT AT ALL/VERY LITTLE	PERCEIVED UTILIZATION OF TRAINING FAIRLY WELL TO PERFECT NOT AT ALL/VERY LITTLE	SENSE OF ACCOMPLISHMENT GAINED FROM WORK SATISFIED NEUTRAL DISSATISFIED	RE-ENLISTMENT INTENTIONS YES, OR PROBABLY YES NO, OR PROBABLY NO WILL RETIRE

IMPLICATIONS

The Fire Protection career ladder (AFSC 3E7X1) was surveyed to obtain current job and task data for use in examining training programs. Survey results are based on responses from 1,925 AFSC 3E7X1 personnel, 51 percent of the total personnel assigned and 54 percent of the total personnel surveyed.

Survey results indicate that the present classification structure, as described in the latest specialty description, reflects the jobs performed in this career ladder. Most personnel are distributed into the Firefighter Job (63 percent), or the Management Cluster (9 percent).

Personnel in the Fire Protection career ladder follow a typical career progression pattern. Three- and 5-skill level personnel perform technical functions oriented toward general fire protection activities. Seven- and 9-skill level members perform more supervisory and management tasks.

An analysis of the Specialty Training Standard (STS) indicates that it is very well supported, with the exception of the General Contingency Responsibilities area, where five areas should be reviewed by training personnel for possible removal. Tasks with high performance and training indicators that are not matched to STS-appropriate areas should be considered for inclusion in the structured training environment.

A comparison to the previous 1995 survey and to direct support AFSCs surveyed in 1997, indicates AFSC 3E7X1 members are satisfied. Surprisingly, reenlistment intentions have decreased across all TAFMS groups.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF SPECIALTY JOBS

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE I FIREFIGHTER APPRENTICE JOB (ST050)

TASKS		MEMBERS PERFORMING (N=107)
B0086	Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers, or standpipes	88
B0093	Don or doff self-contained breathing apparatus (SCBAs) while wearing protective clothing	87
B0083	Carry ladders	86
B0092	Don or doff PPE for firefighting operations, other than hazardous materials	85
B0119	Operate SCBAs	85
B0084	Carry tools or equipment, other than hose lines, up or down ladders	85
B0082	Carry hose lines up or down ladders	80
B0116	Operate fire hydrants	79
B0120	Operate smoke ejectors or blowers	74
B0085	Carry victims up or down ladders	73
B0115	Operate fire extinguishers	71
B0079	Advance hose lines	69
B0126	Perform hose loads or finishes	68
B0098	Extend hose lines	64
B0118	Operate nozzles, such as adjustable gallonage, variable-flow, or automatic	58
B0138	Raise or lower ladders, other than aerial ladders	58
B0132	Perform ventilation procedures using positive pressure	54
B0137	Position and secure ladders, other than aerial ladders	54
B0133	Perform ventilation procedures using powered equipment	49
B0141	Secure hose lines to ladders	48
B0146	Tie specific knots used in various firefighting operations	47
B0112	Operate auxiliary power generators	46
B0087	Determine appropriate agents for firefighting operations	45
B0081	Assist in reservicing barriers	44
B0129	Perform master stream operations	44
B0145	Tie rescue knots to victims or mannequins	44

TABLE II FIREFIGHTER JOB (ST119)

T. 1 G77 G		PERCENT MEMBERS PERFORMING
TASKS		(N=1,213)
B0119	Operate SCBAs	99
B0093	Don or doff self-contained breathing apparatus (SCBAs) while wearing	98
10073	protective clothing	70
K0449	Clean firefighting vehicles	97
B0083	Carry ladders	97
B0120	Operate smoke ejectors or blowers	97
B0086	Connect or disconnect firehoses to or from fire apparatus, hydrants,	96
	sprinklers, or standpipes	
B0084	Carry tools or equipment, other than hose lines, up or down ladders	96
B0092	Don or doff PPE for firefighting operations, other than hazardous	96
	materials	
B0116	Operate fire hydrants	95
K0458	Inspect SCBAs	95
B0082	Carry hose lines up or down ladders	95
K0450	Clean forcible entry tools	94
B0126	Perform hose loads or finishes	94
K0448	Clean firefighting equipment, other than forcible entry tools	94
F0304	Respond to structural fires	94
K0456	Inspect or maintain protective clothing	94
B0098	Extend hose lines	93
B0138	Raise or lower ladders, other than aerial ladders	93
F0291	Attack and extinguish structural fires	93
H0343	Attack and extinguish miscellaneous Class-A fires	92
B0115	Operate fire extinguishers	91
I0362	Chock wheels of firefighting vehicles	91
F0295	Make forcible entries into buildings	91
B0118	Operate nozzles, such as adjustable gallonage, variable-flow, or	91
	automatic	
K0451	Demonstrate operation of firefighting equipment	91
K0455	Inspect or maintain powered equipment	91
K0454	Inspect or maintain ladders	91
B0079	Advance hose lines	90
K0453	Inspect or maintain forcible entry tools	90
F0296	Overhaul structural fires	90
B0146	Tie specific knots used in various firefighting operations	90

TABLE III TECHNICAL TRAINING INSTRUCTOR JOB (GP042)

		PERCENT MEMBERS
		PERFORMING
TASKS		(N=42)
D110	O CODA	100
B119	Operate SCBAs	100
K458	Inspect SCBAs	98
K456	Inspect or maintain protective clothing	90
K455	Inspect or maintain powered equipment	90
B93	Don or doff SCBAs, while wearing PPE	86
B138	Raise or lower ladders, other than aerial ladders	83
K451	Demonstrate operation of firefighting equipment	81
K454	Inspect or maintain ladders	81
K472	Reservice SCBAs	79
K470	Perform preventive maintenance on SCBAs	79
B92	Don or doff PPE for firefighting operations, other than hazardous	79
** 4 * 0	materials	
K450	Clean forcible entry tools	79 - 2
K449	Clean firefighting vehicles	79
B116	Operate fire hydrants	79
B113	Operate cascade systems	76
Q816	Evaluate progress of trainees	76
Q819	Maintain training equipment	76
B83	Carry ladders	76
B120	Operate smoke ejectors or blowers	76
Q824	Personalize lesson plans	74
K469	Operationally test SCBAs	74
K453	Inspect or maintain forcible entry tools	74
K448	Clean firefighting equipment, other than forcible entry tools	74
Q806	Counsel trainees on training progress	69
Q820	Maintain training record or files	69
I370	Inspect fire department vehicles	69
I366	Document vehicle deficiencies	69
B84	Carry tools or equipment, other than hose lines, up or down ladders	69
B86	Connect or disconnect firehoses to or from fire apparatus	69
Q775	Administer or score tests	64
Ò776	Brief personnel concerning training programs or matters	64

TABLE IV

FIRST-LINE SUPERVISION JOB (ST116)

TASKS		PERCENT MEMBERS PERFORMING (N=107)
B0119	Operate SCBAs	94
B0146	Tie specific knots used in various firefighting operations	88
K0466	Maintain station facilities	87
K0451	Demonstrate operation of firefighting equipment	87
P0669	Determine or establish work assignments or priorities	86
K0458	Inspect SCBAs	86
K0459	Maintain crash firefighting tools or equipment	86
F0304	Respond to structural fires	86
P0661	Conduct task evaluations	85
B0092	Don or doff PPE for firefighting operations, other than hazardous materials	85
B0120	Operate smoke ejectors or blowers	85
K0457	Inspect or maintain rescue ropes	85
B0132	Perform ventilation procedures using positive pressure	85
B0131	Perform ventilation procedures using manual forcible entry tools	85
B0115	Operate fire extinguishers	85
H0351	Size up or evaluate miscellaneous Class-A fires	85
J0399	Establish triage areas	85
F0296	Overhaul structural fires	85
K0469	Operationally test SCBAs	84
P0650	Assign personnel to work areas or duty positions, other than for mobility or contingency	84
I0390	Position equipment, other than ladders	84
B0086	Connect or disconnect firehoses to or from fire apparatus, hydrants, sprinklers, or standpipes	84
B0133	Perform ventilation procedures using powered equipment	84
B0134	Perform ventilation procedures using water fog patterns	84
J0414	Perform drags or carries	84
J0413	Perform cardiopulmonary resuscitation (CPR)	84
H0353	Size up or evaluate miscellaneous Class-C fires	84
H0345	Attack and extinguish miscellaneous Class-C fires	84
P0664	Counsel subordinates concerning personal matters	83
K0467	Maintain structural firefighting tools or equipment	83
B0116	Operate fire hydrants	83
I0381	Operate vehicle pump controls	83

TABLE V MANAGEMENT CLUSTER (ST053)

TASKS		PERCENT MEMBERS PERFORMING (N=173)
	compliance with military standards	84
P0716 Evaluate personnel for	or compliance with performance standards	82
P0771 Write recommendation	ons for awards or decorations	79
P0657 Conduct self-inspection	ons or self-assessments	79
P0732 Interpret policies, dire	ectives, or procedures for subordinates	77
P0709 Evaluate emergency i	response procedures	76
P0770 Write or indorse milit	ary performance reports	75
Q0816 Evaluate progress of t	trainees	73
P0661 Conduct task evaluati		73
P0660 Conduct supervisory	performance feedback sessions	73
P0664 Counsel subordinates	concerning personal matters	72
P0728 Improve work method	ds	72
P0717 Evaluate personnel fo	r promotion, demotion, reclassification, or special	71
	erning training programs or matters	71
Q0806 Counsel trainees on tr		70
P0714 Evaluate job hazards		70
	orientations for newly assigned personnel	68
	ed due to substandard performance of personnel	68
	ordance with local emergency response plans,	67
•	ings, such as staff meetings, briefings,	64
-	e standards for subordinates	64
1	s materials incident sites	64
	ress in career development courses (CDCs)	63
	erations as on-scene commander	63
P0734 Investigate accidents		62
	zardous materials spills or leaks	62
	ng from aircraft, buildings, or towers	62
Q0796 Conduct safety training		62
	n work assignments or priorities	62
A0063 Research fire protection	-	62
•	ns for hazardous materials incidents	62

TABLE VA

COURSE MANAGEMENT JOB (ST128)

TASKS		PERCENT MEMBERS PERFORMING (N=5)
	•	
R0847	Maintain administrative files	100
P0716	Evaluate personnel for compliance with performance standards	100
P0771	Write recommendations for awards or decorations	100
P0731	Inspect personnel for compliance with military standards	100
Q0788	Conduct formal course classroom training	80
Q0808	Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)	80
Q0824	Personalize lesson plans	80
C0153	Input computer data	80
P0728	Improve work methods	80
Q0812	Develop written tests	80
Q0775	Administer or score tests	80
Q0816	Evaluate progress of trainees	80
Q0818	Inspect training materials or aids for operation or suitability	80
Q0810	Develop or procure training materials or aids	80
P0770	Write or indorse military performance reports	80
P0659	Conduct supervisory orientations for newly assigned personnel	80
P0717	Evaluate personnel for promotion, demotion, reclassification, or special awards	80
Q0820	Maintain training records or files	80
Q0777	Complete student entry or withdrawal forms	80
R0838	Establish or maintain publications libraries	80
S0875	Inventory equipment, tools, parts, or supplies, other than communications equipment	80
R0839	Establish or maintain videotape libraries	80
P0657	Conduct self-inspections or self-assessments	80
S0872	Evaluate serviceability of equipment, tools, parts, or supplies	80
Q0819	Maintain training equipment	60
P0648	Analyze budget requirements	60
P0758	Prioritize budget requirements	60
P0762	Review budget requirements	60
Q0811	Develop training programs, plans, or procedures, other than for computers	60
R0865	Type administrative reports, records, or correspondence	60
O0813	Establish or maintain study reference files	60

TABLE VB

ASSISTANT CHIEF OF TRAINING JOB (ST205)

•		PERCENT
		MEMBERS
		PERFORMING
TASKS	•	(N=28)
Q0816	Evaluate progress of trainees	100
Q0822	Monitor student progress in career development courses (CDCs)	96
Q0820	Maintain training records or files	96
Q0776	Brief personnel concerning training programs or matters	96
Q0806	Counsel trainees on training progress	96
Q0794	Conduct ongoing proficiency training	96
Q0829	Schedule in-house training, such as mobility, Prime BEEF, instructor, or	96
	proficiency training	
Q0807	Determine training requirements	93
Q0813	Establish or maintain study reference files	93
Q0817	Evaluate training methods or techniques of instructors	93
Q0775	Administer or score tests	93
Q0795	Conduct pre-exercise training	93
Q0784	Conduct egress training from aircraft, buildings, or towers	93
Q0815	Evaluate effectiveness of training programs, plans, or procedures, other	89
	than computer training	
Q0819	Maintain training equipment	89
Q0798	Conduct structural firefighting training	89
Q0778	Conduct aircraft egress systems training	89
Q0796	Conduct safety training	89
Q0823	Monitor task qualification training (TQT)	86
Q0810	Develop or procure training materials or aids	86
Q0782	Conduct disaster-type drills, such as MAREs	86
Q0811	Develop training programs, plans, or procedures, other than for computers	82
Q0818	Inspect training materials or aids for operation or suitability	82
Q0824	Personalize lesson plans	. 82
Q0812	Develop written tests	82
Q0783	Conduct drafting exercises	82
Q0831	Write training reports	82
Q0828	Recommend personnel for training, other than by outside training	82
	agencies	
P0744	Participate on exercise evaluation teams (EETs)	. 79
00826	Prepare training requirements requests	79

TABLE VC ASSISTANT CHIEF OF OPERATIONS JOB (ST129)

TASKS		PERCENT MEMBERS PERFORMING (N=98)
P0731	Inspect personnel for compliance with military standards	95
P0709	Evaluate emergency response procedures	95
P0770	Write or indorse military performance reports	94
P0771	Write recommendations for awards or decorations	94
P0716	Evaluate personnel for compliance with performance standards	94
P0732	Interpret policies, directives, or procedures for subordinates	93
P0717	Evaluate personnel for promotion, demotion, reclassification, or special awards	92
P0660	Conduct supervisory performance feedback sessions	92
P0664	Counsel subordinates concerning personal matters	91
P0654	Conduct post-incident analyses of fire incidents	91
P0657	Conduct self-inspections or self-assessments	89
E0279	Initiate actions in accordance with local emergency response plans, SOPs, or DOT Guidebook	89
P0684	Direct emergency operations as on-scene commander	88
P0724	Implement incident command or management systems	88
P0714	Evaluate job hazards	88
P0728	Improve work methods	87
P0696	Establish performance standards for subordinates	86
P0729	Initiate actions required due to substandard performance of personnel	86
P0669	Determine or establish work assignments or priorities	86
E0284	Respond to hazardous materials incident sites	86
P0659	Conduct supervisory orientations for newly assigned personnel	85
P0655	Conduct post-incident analyses of hazardous materials incidents	85
E0289	Size up or evaluate hazardous materials spills or leaks	85
P0676	Develop or establish work schedules	84
B0094	Ensure compliance with pre-incident plans	84
E0265	Develop response plans for hazardous materials incidents	84
E0268	Direct resources during hazardous materials incidents	84
P0673	Develop methods for improving firefighting techniques	82
P0670	Develop firefighter accountability procedures	82
P0734	Investigate accidents or incidents	82

TABLE VD FIRE PROTECTION/PREVENTION MANAGEMENT JOB (ST120)

TASKS		PERCENT MEMBERS PERFORMING (N=11)
40060		100
A0063	Research fire protection publications	100
P0720	Evaluate priorities FSD programs	91
P0713	Evaluate inspection report findings or inspection procedures	91
P0712	Evaluate fire station facilities	91
A0064	Review alteration plans for compliance with fire safety requirements	91
A0058	Participate in preconstruction conferences	91
A0055	Monitor USAF Hazard Abatement Program, including USAF risk assessment code (RAC) open items	91
P0657	Conduct self-inspections or self-assessments	91
A0036	Inspect hangars	91
A0006	Conduct building evacuation drills	91
A0008	Conduct fire investigations	91
P0711	Evaluate fire protection programs	82
P0710	Evaluate fire prevention programs	82
P0709	Evaluate emergency response procedures	82
R0857	Maintain self-inspection or self-assessment program checklists	82
A0052	Maintain inspection schedules	82
P0714	Evaluate job hazards	82
A0068	Schedule fire prevention activities	. 82
P0772	Write replies to inspection reports	82
A0065	Review or approve design drawings or new construction plans for compliance with fire safety requirements	82
A0066	Review workorder requests	82
A0043	Inspect self-help projects	8 2 8 2
A0022	Develop inspection procedures	82 82
A0059	Participate in work review boards	82 82
A0033	Conduct new construction fire safety acceptance inspections	82 82
A0004	Brief personnel on fire safety or fire reporting procedures	82 82
A0069	Schedule or coordinate fire detection or suppression system tests	82
A0037	Inspect hazard storage areas, such as hazardous materials pharmacies	82
A0040	Inspect munitions storage areas	82 82
A0007	Conduct construction in-progress inspections	82 82
A0007	Conduct followup inspections	82 82
A00011 A0005	Complete workorder requests	82 82
A0003	Inspect cooking facilities	82 82
/ N 1 / 1 / 1 / .	THE TOTAL SANDER HIS TOTAL HIS TOTAL SANDERS OF THE	0/

TABLE VI

FACC OPERATOR JOB (ST127)

TASKS		PERCENT MEMBERS PERFORMING (N=124)
1110110		(2. 2. 2. 2.)
C0151	Inform crews of locations and nature of emergencies	98
C0150	Implement recalls of firefighters	. 98
C0149	Dispatch firefighting vehicles	98
C0155	Inspect, operate, or maintain fire alarm communications center (FACC) recording equipment	98
C0182	Monitor radios, scanners, or networks	97
C0191	Operate emergency telephone dispatch systems	97
C0153	Input computer data	96
C0192	Operate fire alarm reporting systems	96
C0205	Record incoming fire calls	95
C0157	Locate and relay hazardous materials information to firefighting crews	95
C0204	Receive, record, or transmit administrative calls	94
C0187	Notify fire department facilities or personnel of weather warnings	94
C0152	Initiate or complete Department of Defense (DOD) fire reporting system (DODFIRS) reports	93
C0147	Alert firefighting crews	92
C0190	Obtain or interpret wind directions	92
C0202	Read and interpret symbols on maps or charts	92
C0158	Locate and relay information from munitions technical orders (TOs) to firefighting crews	92
C0181	Monitor fire alarm system recording devices	90
C0208	Test house bells or alert tones	90
C0174	Maintain off-duty personnel recall rosters	90
C0167	Maintain firefighting vehicle status boards	88
C0177	Maintain system outage boards	88
C0188	Notify or coordinate emergencies with support agencies	88
C0197	Plot entry control points (ECPs)	87
C0166	Maintain fire station logs	86
C0189	Notify staff sections of emergencies	86
C0185	Notify appropriate agencies in accordance with local emergency response plans, SOPs, or Department of Transportation (DOT) Guidebook	86
C0163	Maintain computer-aided dispatch systems, related automated logbooks, or prefire plan programs, with backups	85
C0162	Maintain computer programs	85

TABLE VII

FIRE INSPECTION JOB (ST172)

		MEMBERS PERFORMING
TASKS		(N=36)
A0051	Maintain facility foldows	100
	Maintain facility folders	100
A0063	Research fire protection publications	
A0067	Schedule facility inspections	100
A0004	Brief personnel on fire safety or fire reporting procedures	100
A0032	Inspect cooking facilities	100
A0068	Schedule fire prevention activities	100
A0043	Inspect self-help projects	100
A0006	Conduct building evacuation drills	100
A0011	Conduct followup inspections	100
A0014	Conduct newcomers' briefings	100
A0030	Inspect base facilities, such as family housing, public assemblies, or cold storage plants, other than target hazards	97
A0052	Maintain inspection schedules	97
A0036	Inspect hangars	97
A0037	Inspect hazard storage areas, such as hazardous materials pharmacies	97
A0009	Conduct fire safety briefings for social functions	97
A0054	Maintain records of location and types of fire extinguishers	94
A0050	Issue welding, open-flame, or cutting permits	94
A0024	Distribute fire prevention materials, such as pamphlets, leaflets, or pot holders, to base populace	94
A0049	Inspect warehouses	94
A0019	Determine occupancy loads for public assemblies	94
A0012	Conduct housing occupancy briefings	92
A0034	Inspect flammable locker authorizations	92
A0022	Develop inspection procedures	92
A0010	Conduct fire safety meetings for facility managers	92
A0033	Inspect facilities prior to social events, such as lights for holiday displays	92
A0020	Develop fire prevention techniques	92
A0007	Conduct construction in-progress inspections	92
A0066	Review workorder requests	89
A0005	Complete workorder requests	89
A0027	Implement fire prevention week programs	89
A0021	Develop fire prevention week programs	89

TABLE VIII

LOGISTICS NCO JOB (ST112)

		PERCENT MEMBERS
		PERFORMING
TASKS		(N=18)
S0879	Maintain International Merchants Purchase Authorization Card	100
	(IMPAC) purchase logs	
S0888	Research commercial vendors for new equipment item procurement	100
S0884	Pick up, deliver, or store equipment, tools, parts, or supplies	100
S0881	Maintain property CA/CRLs	100
S0883	Monitor precision measurement equipment laboratory (PMEL) listings	100
S0887	Reconcile IMPAC accounts	94
S0876	Issue or log turn-ins of equipment, tools, parts, or supplies	94
S0891	Verify M-36 obligated due-out listings	94
S0878	Maintain D04 daily document registers or item surveillance lists	89
S0874	Initiate requisitions for equipment, tools, parts, or supplies	83
S0890	Verify D-18 supply due-out listings	83
S0877	Maintain documentation on items requiring periodic inspections or	83
	calibrations	
S0875	Inventory equipment, tools, parts, or supplies, other than	78
	communications equipment	
P0766	Write fiscal year (FY) budget projections	78
P0758	Prioritize budget requirements	. 78
P0762	Review budget requirements	78
P0685	Draft budget requirements	72
P0648	Analyze budget requirements	72
S0885	Prepare, coordinate, or maintain equipment reports	56
S0873	Identify equipment for repairs or disposal	56
P0668	Determine or establish logistics requirements, such as personnel,	50
	equipment, tools, parts, supplies, or workspace	
P0652	Compare cost estimates for acquisition of equipment	50
P0759	Procure funding	50

TABLE IX FIRE EXTINGUISHER MAINTENANCE JOB (ST102)

		PERCENT MEMBERS
TD A CTT C		PERFORMING
TASKS		(N=9)
L0481	Maintain fire extinguisher records	100
L0478	Inspect fire extinguishers	100
L0493	Remove or replace fire extinguisher valve assemblies	100
L0490	Remove or replace fire extinguisher gauges	100
L0489	Remove or replace fire extinguisher firehoses	100
L0487	Remove or replace extinguisher cart tires	100
L0492	Remove or replace fire extinguisher nozzles	100
L0504	Service dry-chemical extinguishers	89
A0054	Maintain records of location and types of fire extinguishers	89
L0480	Install safety pin display seals	89
L0477	Identify malfunctions to extinguisher cart components	89
L0476	Identify damages to extinguisher cart components	89
L0503	Reservice or recover halon	89
L0507	Service pressurized water extinguishers	89
L0482	Maintain stock levels for replacement parts	78
B0115	Operate fire extinguishers	78
L0502	Replace nitrogen bottles	78
L0500	Repair extinguisher cart tires	78
L0498	Remove or replace reflective tape	78
L0479	Install fire extinguishers	78
L0501	Replace damaged extinguisher carts	78
L0508	Service test fire extinguishers	67
L0475	Hydrostatically test fire extinguisher cylinders	67
L0486	Remove or replace discharge levers	67
L0491	Remove or replace fire extinguisher horns	67
L0505	Service dry-powder extinguishers	56
A0076	Track and document halon emissions	56
L0509	Stencil numbers on fire extinguishers	56
L0494	Remove or replace holding straps	56
A0004	Brief personnel on fire safety or fire reporting procedures	56
L0496	Remove or replace hose handle nipples	56
T 0497	Remove or replace nump components	56

THIS PAGE INTENTIONALLY LEFT BLANK